

Global Information Assurance Certification Paper

Copyright SANS Institute Author Retains Full Rights

This paper is taken from the GIAC directory of certified professionals. Reposting is not permited without express written permission.

Interested in learning more?

Check out the list of upcoming events offering "Auditing Systems, Applications, and the Cloud (Audit 507)" at http://www.giac.org/registration/gsna

Auditing User Accounts in a Windows 2000/2003 (Active Directory) Domain

GSNA Practical v4.0

Option # 1 Topic 1 – "Testing"

> Charlie Clauss 4/1/2005

Abstract

The use of a Windows 2000/2003 Active Directory Domain has become an industry standard. The domain user authentication process is relied upon to protect the information assets stored on the servers (and workstations) within the enterprise or organization. In many cases it is the only level of authentication that is in use.

This paper describes some of the vulnerabilities that may be present due to a combination of mis-configured security settings, weak or missing passwords, and poor attention to user management. The purpose is to then describe several of the risks associated with these combinations, detail the tests that can be performed to measure the extent of the risk, and show the results of actual tests performed.

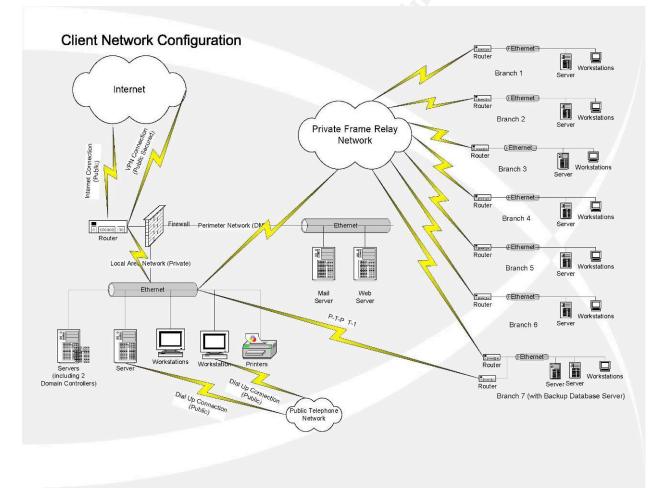
Table of Contents

Table of Contents		2
Table of Contents		3
1: Identification		4
2: Risk Analysis		7
2.1 Review User Accounts and Groups		
2.2 Review Group Policy Objects and Assignment	10	
2.3 Review Password Strength	12	
2.4 Risk Summary	12	
3: Testing		13
3.1 Review User Accounts and Groups	13	
3.2 Review Group Policy Objects and assignment		
3.3 Review Password Strength	28	
4: Audit		39
4.1 Review User Accounts and Groups	39	
4.2 Review Group Policy Objects and Assignment.		
4.3 Review Password Strength		
4.4 Institution Policies related to passwords and users	62	
4.4 Conclusions		
References		65

1: Identification

The specific system used in this audit process and results is a Windows 2000 domain in a regional financial institution. All names and addresses have been changed or obscured for privacy purposes. The domain consists of approximately fourteen (14) servers and one hundred (100) workstations on a "flat" Wide Area Network of eight (8) locations. Each location has its own Domain Controller and there are two (2) DC's at the operations center where the onsite portion of this audit took place.

While the results shown here are specific to the financial institution in question, experience has shown that the elements of the audit are representative of most small organizations using the Windows 2000/2003 Domain model. It should be noted that the introduction of multiple domains with trust relationships significantly (possibly exponentially) increases the complexity of audit. The complex system is not addressed in this paper, but the concepts and tests used are most certainly applicable.



The following is a diagram of the network in which the Active Directory domain exists:

Figure 1.1 Network Diagram

This domain protects the institution's confidential information including, but not limited to, customer name, address, driver's license images, and other personal data, proprietary institution processes and financial information, and employee personal information such as name, address, social security number, family data, and limited medical information. Impact on the institution of a compromise and unauthorized access to this information is shown in the chart below:

Unauthorized access to:	Possible Result	Possible Consequence
Customer Information	Identity theft Lawsuit	Public Relations and stock value risk Officer liability under Sarbanes Oxley Gramm-Leach-Bliley Act violation FDIC insurability issue
Financial Information	Sold to competitor	Profit impact Stock value risk
Employee Information	Identity theft Lawsuit	Possible HIPPA violation

Figure 1.2 Chart of Risks

The scope of this audit is limited to the single domain, a representative Domain Controller, and associated domain users and groups. There are several ways that domain authentication could be compromised:

Access method	Causal Weaknesses	Method
Hack from Public side of firewall	Weak firewall Domain controller accessible from public side	Buffer overflows Scans
Hack from network	 Most likely vulnerability Physical access to network switches weak Wireless access available Hubs rather than switches Physical access to workstations not protected 	 Scanner sniffing passwords Key loggers "Shoulder surfing"
Hack directly on domain controller	Physical security weak	Scanner sniffing passwords Key loggers
Valid user probing the network	 Configuration of user / group assignment Group Policy configuration error Failure to maintain old user accounts 	 User discovers elevated rights either purposely or accidentally User attempts access with another user's credentials

Figure 1.3 Chart of Vulnerabilities

There are many resources that discuss best practices in setting up security on a Windows 2000/2003 domain. One example that is clear and concise is University of Washington School of Medicine's Security procedures¹. These should, of course, be adjusted to fit the organization's overall Risk Assessment and Mitigation strategy. Another good source on best practice is Kathy Ivens' "Getting Started with Windows Administration"². Financial institutions should insure that Operating System access meets or exceeds the guidelines set forth in the FFIEC Information Security - IT Examination Handbook³. Lastly, one of the primary reasons for detailed auditing of the Windows 2000/2003 domain user accounts comes from Microsoft TechNet's "10 Immutable Laws of Security" 4:

Law #5: Weak passwords trump strong security

The purpose of having a logon process is to establish who you are. Once the operating system knows who you are, it can grant or deny requests for system resources appropriately. If a bad guy learns your password, he can log on as you. In fact, as far as the operating system is concerned, he is you. Whatever you can do on the system, he can do as well, because he's you. Maybe he wants to read sensitive information you've stored on your computer, like your e-mail. Maybe you have more privileges on the network than he does, and being you will let him do things he normally couldn't. Or maybe he just wants to do something malicious and blame it on you. In any case, it's worth protecting your credentials.

Always use a password-it's amazing how many accounts have blank passwords. And choose a complex one. Don't use your dog's name, your anniversary date, or the name of the local football team. And don't use the word "password"! Pick a password that has a mix of upper- and lower-case letters, number, punctuation marks, and so forth. Make it as long as possible. And change it often. Once you've picked a strong password, handle it appropriately. Don't write it down. If you absolutely must write it down, at the very least keep it in a safe or a locked drawer-the first thing a bad guy who's hunting for passwords will do is check for a vellow sticky note on the side of your screen, or in the top desk drawer. Don't tell anyone what your password is. Remember what Ben Franklin said: two people can keep a secret, but only if one of them is dead.

Finally, consider using something stronger than passwords to identify yourself to the system. Windows 2000, for instance, supports the use of smart cards, which significantly strengthens the identity checking the system can perform. You may also want to consider biometric products like fingerprint and retina scanners.⁴

¹ https://security.uwmedicine.org/Docs/Procs/MSWebsiteWin2000ServerSecurity.htm ² http://www.windowsitpro.com/Windows/Article/ArticleID/40721/40721.html

³ http://www.ffiec.gov/ffiecinfobase/html_pages/it_01.html#infosec

⁴ http://www.microsoft.com/technet/archive/community/columns/security/essays/10imlaws.mspx

2: Risk Analysis

In <u>Calculating Your Security Risk</u>, Peter Tippett, Chief Technology Officer of Reston, Virginia-based TruSecure[™] Corp. defines Risk as "Threat Times Vulnerability Times Cost"⁵.

A comprehensive guide to Risk Assessment methodology can be found in Microsoft Corporation's <u>Security Risk Management Guide</u> Chapter 4: Assessing Risk⁶, and defines risk in a similar fashion.

The structure of the risk assessment, no matter the source, is very similar:

- Identify and rate the potential threat
- Identify and rate the potential vulnerability
- Identify and rate the cost of loss or compromise of the asset that would be exposed

If any of the three are zero, the risk becomes zero. An unpatched Web server connected directly to the Internet, a situation that seems to be very risky, can still have zero if there is no data stored on the server and it is the only device connected. (One could argue that there is still the risk of legal responsibility for its use in a distributed attack, or the cost of having to rebuild the server, but that would be stretching it a bit). The point is that all three must exist for risk to be present, and the magnitude of the risk is directly related to the magnitude of the three elements- Threat, Vulnerability, and Cost. The definition of each element follows.

A <u>threat</u> is an event that may "negatively impact an asset, represented by loss of confidentiality, integrity, or availability of the asset" ⁶. It is always associated with some frequency of likelihood of occurrence, and because of that is more easily measured. It does not have to be an overt attempt at intrusion. Unintentional use of a mis-configured system or an employee's naïve curiosity or ignorance also poses threats.

A <u>vulnerability</u> is a weakness that has the potential to be exploited affecting an asset in some way. Its magnitude can be measured as the likelihood of success of a threat or attack. Negative impact on an asset may be in the form of:

- A competitive advantage obtained
- A legal liability situation
- A regulatory compliance issue
- Influence on the availability of the asset thus affecting revenue or productivity
- Impact on Business or Organizational reputation
- Actual damage to the asset requiring repair or replacement

The magnitude of the vulnerability is related to the following factors:

- Attacker population- The probability of exploit normally increases as the attacker population increases in size and technical skill level.
- Remote vs. local access- The probability normally increases if a vulnerability can be exploited remotely.
- Visibility of exploit- The probability normally increases if an exploit is well known and publicly available.

⁵ http://www.theciostore.com/watchit_product.asp?id=196

⁶ http://www.microsoft.com/technet/security/topics/policiesandprocedures/secrisk/srsgch04.mspx#EAAA

• Automation of exploit- The probability normally increases if an exploit can be programmed to automatically seek out vulnerabilities across large environments.

Microsoft suggests the following rating system based on the probability of vulnerability:

Probability Definitions for Vulnerabilities	
High	
Large attacker population- "script-kiddle"/hobbyist	
Remotely executable	
Anonymous privileges needed	
Externally-published exploitation method	
Automated	
"5" if any apply	
Medium	
Medium attacker population - expert/specialist	
Non-remotely executable	
User level privileges required	
Not publicly-published exploitation method	
Non-automated	
"3" if any apply	
Low	
Small attacker population - insider knowledge	
Non-remotely executable	
Administrator level privileges required	
Not publicly-published exploitation method	
Non-automated	
"1" if all apply	

Figure 4.15 Risk Analysis Worksheet: Evaluating Vulnerability (SRMGTool3)⁶

The **cost** is the estimate of the consequences of a successful exploit (threat to a vulnerability). <u>Direct</u> costs would be the replacement of the damaged information, hardware, and software. Also included in direct cost would be the actual cost of lost business, remediation of the exploit, legal ramifications due to lawsuits or regulatory sanctions, repair to customer or stockholder relations by the Public Relations department. <u>Indirect</u> or difficult to measure costs would be those associated with lost productivity, stockholder and customer confidence, and future business opportunities.

In the Information Technology world, <u>risk</u> is therefore **highest** when there is a potentially frequent threat on a system with known, easily and automatically exploited vulnerabilities, holding (information) assets that are valuable and sensitive to the business or organization responsible for them. Rarely, if ever, will we be able to assess the risk as zero. Some risk must be present if there are assets of value stored on our network where there are multiple people with legitimate access requirements. Risks should be mitigated in a fashion appropriate to their magnitude.

In applying this concept of risk to user accounts in a Windows 2000/2003 domain, we find there are some serious risks associated with users with elevated or mis-configured rights. In figures 1.2 and 1.3 we reviewed the potential risks and vulnerabilities to the financial institution regarding a compromise to their Windows 2000/2003 domain. Those risks could have a serious and detrimental effect on the business. Breach of Gramm-Leach-Bliley and Sarbannes-Oxley could have personal liability repercussions to the officers and Board members. This has a way of making the security of the Windows 2000/2003 domain a very personal issue to the management of the institution.

Three selected impacts and vulnerabilities for testing and audit are as follows:

- 1- Employees with either inappropriate access configured for their own user ID or knowledge of another (possibly terminated) employee's password.
- 2- Improperly configured Group Policy Objects could inadvertently apply rights to users or workstations that yield undesired elevated rights.
- 3- A valid user, or other person with access to the physical network, could attempt to crack the user IDs and passwords of other users.

Industry experts say that between 60 and 80 percent of exploits occur from inside the network. We spend tens of thousands of dollars (and more) on firewalls and Intrusion Detection and Intrusion Prevention systems (IDS/IPS), and very little on simple review of internal network configurations.

Windows 2000 and Windows 2003 are built on a domain authentication scheme that is solid in its foundation. Security related improvements have been significant from the Windows NT 4.0 days, and they continue to improve. Each of these impacts revolves around the underlying data held on the network servers and workstations of the institution. Each vulnerability is caused by a different set of circumstances.

2.1 Review User Accounts and Groups

First, user access to the network information store is limited based upon the user ID and associated group memberships of that user. Rights of all kinds are assigned either directly to a user or to a group of users. Rights are either to resources on a particular computer, or globally on the domain (all member machines). Typically, the local Administrator group and the Domain Administrator group are the groups with the most authority to access and change the underlying security framework of the network. Other groups have either more (as in the Enterprise Admin or Schema Admin group) or less (as in the Everyone group) authority to access and change the rights.

Periodic reviews of user accounts on the domain are essential to maintaining a good security framework. Even if an organization has an extremely tight, rigorous audited process of adding, deleting, and changing users and definition and assignment of authority to users and groups, it is important to review the current status of users and group assignments periodically.

The accounting corollary is that of the difference between a P&L and balance sheet. We can have a great P&L, where our sales are through the roof, but the balance sheet shows that all sales are going into Accounts Receivable (and are not being collected). The balance sheet shows that we have a problem. Review of the user accounts can

show a problem that is not evident by reviewing the user, group, and rights assignment processes. Too many user accounts with Domain Admin rights or Dial-In rights, old accounts that were set up as application service accounts and never deleted, users that are simply no longer using the system (and therefore, possibly shouldn't have an account), accounts that were simply missed or mis-keyed in the entry of the add, delete, or change are all examples of issues that can be caught in a user/group review.

The current policies for user logon windows, remote access, password change frequency, and add/delete/change users should be the backdrop of this review. They will, presumably, define the appropriate risk mitigation strategy for these areas.

2.2 Review Group Policy Objects and Assignment

Included within all Active Directory networks, beginning with Windows 2000, is Microsoft's Change and Configuration Management (CCM) system for Windows. The central component of this system is the Group Policy, which is managed by configuring Group Policy Objects (GPOs). Group Policy Objects are collections of Group Policy settings. GPO's are stored at the domain level, and they affect users and computers that are contained in sites, domains, and organizational units. In addition, each computer has exactly one group of policy settings stored locally, called the local Group Policy object. The Group Policy Object Editor is the Microsoft Management Console (MMC) snap-in that is used to edit Group Policy objects (GPOs). The two kinds of Group Policy objects are local and nonlocal.⁷

Microsoft defines GPO's as follows:

"The infrastructure within Active Directory directory service that enables directory-based change and configuration management of user and computer settings, including security and user data. You use Group Policy to define configurations for groups of users and computers. With Group Policy, you can specify policy settings for registry-based policies, security, software installation, scripts, folder redirection, remote installation services, and Internet Explorer maintenance. The Group Policy settings that you create are contained in a Group Policy object (GPO). By associating a GPO with selected Active Directory system containers--sites, domains, and organizational units--you can apply the GPO's policy settings to the users and computers in those Active Directory containers. To create an individual GPO, use the Group Policy Object Editor. To manage Group Policy objects across an enterprise, you can use the Group Policy Management console."⁸

⁷ http://www.microsoft.com/resources/documentation/WindowsServ/2003/standard/proddocs/en-

us/Default.asp?url=/resources/documentation/WindowsServ/2003/standard/proddocs/en-us/gpe_gpo.asp ⁸ http://www.microsoft.com/resources/documentation/WindowsServ/2003/standard/proddocs/en-

us/Default.asp?url=/resources/documentation/WindowsServ/2003/standard/proddocs/en-us/Storage.asp

Local Group Policy objects are stored on individual computers. Only one local Group Policy object exists on a computer. Local Group Policy object settings can be overwritten by nonlocal settings if they are in conflict; otherwise, both groups of settings apply. Nonlocal Group Policy objects, which are stored on a domain controller, are available only in an Active Directory environment. An <u>organizational unit</u> (OU) is the smallest scope to which a Group Policy object (GPO) can be linked, or over which administrative authority can be delegated. (An organizational unit is an Active Directory logical container into which users, groups, computers, and other organizational units are placed.)⁷ The Group Policies are applied in a layered effect, with <u>deny</u> restrictions taking precedence. Group Policy Inheritance can be blocked, so the actual resulting Group Policies that affect a user can become quite complex.

Group Policy objects, other than the local Group Policy object, are virtual objects. The policy setting information of a GPO is actually stored in two locations: the Group Policy container and the Group Policy template. The Group Policy container is an Active Directory container that stores GPO properties, including information on version, GPO status, and a list of components that have settings in the GPO. The Group Policy template is a folder structure within the file system that stores Administrative Template-based policies, security settings, script files, and information regarding applications that are available for Group Policy Software Installation. The Group Policy container is a directory service object. It includes sub-containers for computer and user Group Policy information. The Group Policy container contains the following data:

- Version information- Used to verify that the information is synchronized with Group Policy template information.
- Status information- Indicates whether the Group Policy object is enabled or disabled for this site
- List of components- Specifies which extensions to Group Policy have settings in the Group Policy object.

The Group Policy template folder contains subfolders, including, but not limited to, the following:

- Adm- Contains all the .adm files for this Group Policy template.
- Scripts- Contains all the scripts and related files for this Group Policy template.
- User- Includes a Registry.pol file that contains the registry settings that are to be applied to users. When a user logs on to a computer, this Registry.pol file is downloaded and applied to the HKEY_CURRENT_USER portion of the registry. The User folder contains an Applications subfolder.
- User\Applications-Contains the application advertisement script files (.aas) that are used by the operating system-based installation service. These files are applied to users.
- Machine- Includes a Registry.pol file that contains the registry settings that are to be applied to computers. When a computer initializes, this Registry.pol file is downloaded and applied to the HKEY_LOCAL_MACHINE portion of the registry. The Machine folder contains an Applications subfolder.
- Machine\Applications- Contains the .aas files that are used by the operating system-based installation service. These files are applied to computers.⁹

⁹ Microsoft Corporation

As you may imagine, the use of Group Policy Objects can get quite complex. In fact, the lack of a way to view which Group Policy actually delivered a particular setting to a user or workstation was a serious shortcoming (certainly for auditors) in Windows 2000. With the introduction of Windows XP and Windows 2003 came the Group Policy Management Console which "allows management of Group Policy across sites, domains, and organizational units within one or more forests"⁹ It installs on a Windows XP or 2003 workstation or server and can review the effects of all GPO

We will focus here on the two possible errors in administration that affect the GPO delivered to a particular user- A mis-configuration of a GPO that delivers incorrect rights to a user, or an assignment of an incorrect GPO to an unauthorized user. It is possible that a more restrictive GPO is delivered to a user than is authorized. Usually, this is discovered because the user is denied access to a file or service required to perform his/her job. It is highly unusual for a user to highlight the fact that he/she has been granted rights to which he/she is not authorized. The latter is the true risk of GPO misconfiguration.

2.3 Review Password Strength

Any person with physical access to the network has a window to crack the passwords of the domain. Most small to mid-sized organizations are not sophisticated enough to have the controls in place to prevent or foil such an attempt. A process can be added to any computer that captures keystrokes as they occur, a program can be loaded and run that will attempt to crack the domain passwords just by pointing it at a domain controller.

So, our security mission is twofold. We need to put controls into place to reduce the possibility of key logger and cracking programs being introduced to our network. Testing for this particular vulnerability is not addressed in this paper.

Secondly, we need to insure that our passwords are strong enough to withstand a cracking attempt for a period of time. The length of time that any password needs to be capable of withstanding an attack is the maximum amount of time between forced changes of passwords, or until the attack is detected, isolated, and stopped. (Vulnerability window = Identification time + Remediation time). The password policy, the implementation of password security (password length, complexity, and change frequency), and the testing of passwords should all be reviewed to determine risk.

2.4 Risk Summary

Since we initially began this section defining risk as Threat ^x Vulnerability ^x Cost, our three impacts all have <u>high risk</u>. While the organization and its Information Services staff may argue that the <u>threats</u> and <u>vulnerabilities</u> associated with the three impacts- user and/or group mis- configuration, Group Policy Object mis-configuration, and password hacking, are mitigated in some way, it cannot be argued that the <u>cost</u> of potential loss or compromise of the assets on the network make this a very important audit area.

3: Testing

This section presents testing for the three areas of impact selected above. It assumes a certain level of familiarization with installing programs, working with users and groups, and Active Directory concepts.

3.1 Review User Accounts and Groups

A review of the users and groups defined on the domain can be undertaken using the following steps:

- Use a tool to capture user and group information from the domain controller
- Organize the output for ease of analysis
- Identify the users with elevated rights (Remote Access, etc.) and verify authority
- Identify users belonging to <u>groups</u> with elevated rights and verify authority

The simplest tools for reviewing users and groups are Somarsoft's DUMPSEC (formerly DUMPACL) and Hyena. The 2.8.2 version of DUMPSEC was used for this testing.

Preparation:

- Use a workstation or laptop with network access to the domain controller
- Insure you have administrative access to the domain (either as a Domain Admin or have the step of data collection performed by a Domain Admin under your supervision)
- Download and install DUMPSEC from the systemtools.com site¹⁰
- Insure a copy of Microsoft Excel is available for the analysis of collected data
- A fairly advanced knowledge of Excel (or a staff member who can assist) is very helpful.

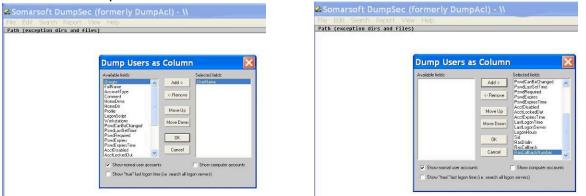
Data Collection

- Launch DUMPSEC
- Using the Report "Select a Computer" type the name of the domain controller (e.g. <u>\\dc1</u>)

	ch Report View Help		
th (exception	di Select Computer	_	
	Refresh	F5	
	Permissions Report Options		
	Dump Permissions for File System		
	Dump Permissions for Registry		
	Dump Permissions for Printers		
	Dump Permissions for Shares		
	Dump Permissions for Shared Directory	8	
	Dump Permissions for All Shared Direc	tories	
	Dump Users as column		
	Dump Users as table		
	Dump Groups as column		
	Dump Groups as table		
	Dump Users as table fast (names only)		
	Dump Policies		
	Dump Rights		
	Dump Services		

¹⁰ Copyright 1994-1998 Somarsoft, Inc., Distribution point http://www.systemtools.com/somarsoft

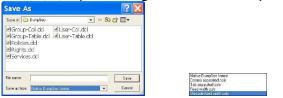
- Select Dump Users as column



 Highlight the Groups field in Available fields and press Add->. This will move it to the Selected field column. Repetitively press the Add-> key until all fields have been selected. Then press OK. The report should populate:

ninistrator	
Groups	Administrators (Local, Administrators have complete and unrestricted access to the computer/domain)
FullName	
AccountType	User
Comment	Built-in account for administering the computer/domain
HomeDrive	
HomeDir	
Profile	
LogonScript	
Workstations	
PswdCanBeChanged	Yes
PswdLastSetTime	7/22/2004 2:58 PM
PswdReguired	Yes
PswdExpires	No
PswdExpiresTime	Never
AcctDisabled	No
AcctLockedOut	No
AcctExpiresTime	Never
LastLogonTime	1/20/2005 1:59 PM
LastLogonServer	1/20/2003 1.37 FH bwcq-102
LogonHours	
Sid	HII S-1-5-21-1399198424-3886189598-1179759684-588
RasDialin	
RasCallback	None
RasCallbackNumber	
PNET	
Groups	Users (Local, Users are prevented from making accidental or intentional system-wide changes. Thus, Users can run certifie
FullName	ASP.NET Machine Account
AccountType	User
Comment	Account used for running the ASP.NET worker process (aspnet_wp.exe)
HomeDrive	
HomeDir	
Profile	
LogonScript	
Workstations	
PswdCanBeChanged	No
PswdLastSetTime	3/24/2005 3:50 PM
PswdRequired	No
PswdExpires	No
PswdExpiresTime	Never
AcctDisabled	No
AcctLockedOut	No
AcctExpiresTime	Never
LastLogonTime	Never
LastLogonServer	bwcq-102
LogonHours	A11
Sid	5-1-5-21-1399190424-3886189598-1179759684-1006
RasDialin	No

- Save the report using File Save Report As



It is a good idea to save each report as Native DumpSec format first. This will preserve the report so that it can be accessed later as required. Also, save the report in Comma Separated Cols- it will be used in Excel for analysis and presentation.

- Perform the same steps for the Dump Groups as column....



Both the User report and the Group report can be printed directly from DUMPSEC. However, review of the printed documents is extremely difficult since the key items are potentially spread throughout hundreds of pages of output. Analysis of the results is simplified with the use of Excel or another spreadsheet program.

The key elements of the user file that should be captured are:

- User
- FullName
- AcctDisabled
- PswdExpiresTime
- PswdLastSetTime
- LogonHours
- LastLogonTime
- RasDialin

The key elements of the group file that should be captured are:

- Group Type
- Group Name
- User

Opening the user file (user-col.txt) in Excel yields the following view:

Text Import Wizard - Step 1 of 3 🛛 🔹 🔀	Text Import Wizard - Step 2 of 3
The Text Wizard has determined that your data is Fixed Width. If this is correct, choose Next, or choose the data type that best describes your data. Original data type Choose the file type that best describes your data: © Delimited • Characters such as commas or tabs separate each field. • Fixed width • Fixed width	This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below. Delimiters Image: Ima
Start import at cow: 1 File grigin: 437 : OEM United States Preview of file C:\Documents and Settings\cclauss.BLUEWATERCG\Desk\User-Col.txt.	Data greview
1 1/28/2005 10:11 AM - Somarsoft DumpSec (formerly DumpAcl) - \\h 2 UserName 3 4 rc=1355 RasAdminUserGetInfo 5 Administrator	<pre>1/28/2005 10:11 AM - Somarsoft DumpSec (formerly DumpAcl) - \\har JserName rc=1355 RasAdminUserGetInfo Administrator</pre>
Cancel < Back Next > Einish	Cancel < Back Next > Einish

Text Import Wizard - Step	o 3 of 3 🛛 🔹 🔀
This screen lets you select each column and set the Data Format.	Column data format ③ General
'General' converts numeric values to numbers, date values to dates, and all remaining values to text.	O Iext O Date: MDY
	O Do not import column (skip)
General	
Data preview	
1/28/2005 10:11 AM - Somarsoft DumpSe UserName	c (formerly Dumpaci) - ((har
rc=1355 RasådminUserGetInfo Ådministrator	
<	
Cancel	<back next=""> Einish</back>

-CI - 1		6		P	0	**
and the second s	And in channels (Longovia - Nach	1			0	
and another sector of the sector shall be	with the demand multipled a rest					
CREW IN						
in this Republication for the						
66 mileit mileit						
Criste	Advisements Gard	Interdam car fully administer the computer/domains				
Groups	Battan Operant Galal	Interdent can legarer the security is back up thesi				
Groupe -	Demain Adminis (Sildes)	Designated administrators of the domain				
Oroape.	Deman Uson (Bobd	All deman avenit				
Goape	Extreprise Advise (2016)	Designated obvioustations of the extremented				
Groupe	Group Palice Creater Deners (Cristel	Monkey in the group can reality propilizing the the domaing				
Cross	Scheme Admine (Debal	Designated administratory of the ochemial				
Drages	10/53/02 Adverse Olicitat	5				
Fullcare -	Amount	2				
Accestive	Thurs.					
Constreet	Built of account the interviewing the computer/Nomain					
HomeCine						
HomaCir						
Profile						
Logendicept	kgih bat:					
Wedgelders	1910					
Post allocharges.	Vet					
Producting	704/000 19.40					
Perdfagund	194					
Punckapasa	1k					
Prediaprection	Here					
AccEleabled	3m					
ArcLockeiCut	He					
Acctivore/Tene	Heres					
LeofLagon Tree	103088 817					
Look.monServer	int .					
Logeritions	N					
58	5-13-2-189522387-8621037464-3305415103-680					
Recorde	Tas					
ResCulture	Nore					
Paul all activity and an						
hand						
Grape	Dermin Deseth (Estate	All domain guarding				
Fulliane.						
Ano marting a	13ser					
Contract	Theil in account the parent access in the computerbarrain					
HoneCow						
Handle						
Perla						
	No. of the second se					
LogenScept	log n bet					
Workplators	1 Mar					
Pavd(attoCharge)	78					
Preskartistime	370018.25					
Poulliquint	Tes					
PeedEqueet	16					
PsisdEspiresTore	liew					
AcciDivated	Tey					
AcciliatedGal	No. Contraction of the second s					
AccElotesTere	Here					
Last.appr.True	Here					
Latal.agonDenat	alt :					
Lainselligate	half column DUNEWG, / sam / post / Randon Created any / Users hat estima CLEEP	the second se				

The information in this tab now needs to be manipulated with some formulas and copying (Edit Copy and Edit Paste Special Values- which is similar to a standard copy/paste except formulas are translated into their corresponding values).

By creating a worksheet that refers to the Users-DUMPACL sheet, a final row can be developed that refers to all of the required information needed.

A36		⊱Full1A37.1)⇔" ",1.")		10.000						
A	B	C	D	E	F	G	Н		J	
Record	User	FullName	AcctDisabled	PswdExpiresTime	PswdLastSetTime	LogonHours	LastLogonTime	RasDialin		
	Administrator									
	Administrator									
	Administrator									
	Administrator		1							
	Administrator		0							
	Administrator		1							
	Administrator									
	Administrator									
	Administrator									
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator								
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator	1							
	Administrator	Administrator	1		7/24/03 10:45 AM					
	Administrator	Administrator			7/24/03 10:45 AM					
	Administrator	Administrator			7/24/03 10:45 AM					
	Administrator	Administrator	,	Nevar	7/24/03 10 45 AM					
	Administrator	Administrator	No	Never	7/24/03 10 45 AM					
	Administrator	Administrator	No	Never	7/24/03 10 45 AM					
	Administrator	Administrator	No	Never	7/24/03 10:45 AM					
	Administrator	Administrator	No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Administrator	Administrator	No	Nevar	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Administrator	Administrator	No	Never	7/24/03 10:45 AM	Alt	1/28/05 9:17 AM			
	Administrator	Administrator	No	Nover	7/24/03 10:45 AM		1/28/05 9 17 AM			
	Administrator	Administrator	No	Never	7/24/03 10 45 AM		1/28/05 9:17 AM	W		
	Administrator	Administrator	No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
_	1 Administrator	Administrator	No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest	Administrator	No No	Nover	7/24/03 10 45 AM		1/28/05 9:17 AM			
	Guest	Administrator	No	Never	7/24/03 10 45 AM		1/28/05 9.17 AM			
	Guest			Never	7/24/03 10 45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/06 9.17 AM			
	Guest		No	Never	7/24/03 10 45 AM		1/28/05 9.17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	7/24/03 10:45 AM		1/28/05 9:17 AM			
	Guest		No	Never	3/7/00 9:50 AM		1/28/05 9:17 AM			
	Guest		No	Never	3/7/00 9 50 AM		1/28/05 9:17 AM			
	Guest		No	Never	3/7/00 9:50 AM		1/28/05 9:17 AM			
	Guest		No	Never	3/7/00 9:50 AM		1/28/05 9:17 AM			
	Guest		Yes	Never	3/7/00 9:50 AM	All	1/28/05 9:17 AM	Yes		
	Guest		Yes	Never	3/7/00 9:50 AM	All	1/28/05 9.17 AM	Yes		
	Guest		Yes	Nover	3/7/00 9 50 AM	All	1/28/05 9:17 AM	Yes		
	Guest		Yes	Never	3/7/00 9 50 AM	Al	Never	Yes		
	Guest		Yes	Never	3/7/00 9:50 AM		Never	Ves		
	Guest		Yes	Never	3/7/00 9:50 AM		Never	Yes		
	Gunet			Isers-full-column-DU			Player	Vac		

Each column's formula refers to the detail worksheet with the actual file from DUMPSEC in such a way that the line with Record = 1 has the complete information about the user as follows:

A =IF(LEFT('Users-Full'!A37,1)<>" ",1,"")

B =IF(LEFT('Users-Full'!A36,1)<>" ",'Users-Full'!A36,B34)

C =IF('Users-Full'!\$A36=C\$1,'Users-Full'!\$B36,C34)

```
D =IF('Users-Full'!$A36=D$1,'Users-Full'!B36,D34)
```

```
E =IF('Users-Full'!$A36=E$1,'Users-Full'!$B36,E34)
```

```
F =IF('Users-Full'!$A36=F$1,'Users-Full'!$B36,F34)
```

```
G =IF('Users-Full'!$A36=H$1,'Users-Full'!$B36,H34)
```

```
H =IF('Users-Full'!$A36=I$1,'Users-Full'!$B36,I34)
```

We can now simply <u>copy</u> the entire sheet, <u>paste special values</u> into a WorkArea sheet, and then sort on the Record column. The rows with the "1" will have all the user data required for analysis.

Another technique used here is to create duplicate worksheets with the same data. They are created in pairs. One that holds the raw information and is sorted in a particular sequence, and the other that points to the relevant information on an underlying sorted sheet. Each raw data sheet is then sorted into the sequence appropriate to the analysis being performed. This allows us to create very professional looking presentation sheets simply, quickly, and as a by-product (rather than an additional effort) of the analysis. Four sets of sheets are created:

- User Statistics- all users are presented for review
- Disabled Users- to review those accounts that may require deletion
- Dial-In- To review user accounts that allow remote access to the network
- Password Age- To review the oldest accounts and consequently most susceptible to unauthorized access.

Each is created by copying the main user statistics sheet, sorting it into the appropriate sequence, and then limiting the printed document to the pertinent information.

Perform a similar analysis for the user groups. Open the Groups-col.txt file in Excel (using commas as delimiters). Create a sheet that points to the worksheet with the actual file from DUMPSEC. The columns and their formulas are as follows:

Group Type =IF(LEFT('Groups-Full'!\$A4,1)<>" ",IF('Groups-Full'!\$C4="Global","Global",IF('Groups-Full'!\$C4="Local","Local","error")),A1) Group Name =IF(LEFT('Groups-Full'!\$A4,1)=" ",B1,'Groups-Full'!\$A4) User =IF(LEFT('Groups-Full'!\$A4,1)=" ",RIGHT('Groups-Full'!\$A4, LEN('Groups-Full'!\$A4)-3),"") GroupTypeName =+A2&" - "&B2

This creates two columns that contain the user and a grouptypename (which is the group type ("Local" or "Global" concatenated with the actual group name). This will allow for an Excel PivotTable function to be performed and the counts of each group to be easily calculated automatically. Cut and Paste Special Values the User and GroupTypeName columns into a worksheet, and then sort to get the blank user names out of the analysis. Using a presentation sheet, as before, makes a good management overview table.

1000000000	ALL OTHER WITH CONTRACT OF LOW DRIVE	
AL		
1 120/2006 10 12 Alt - Samural Da	and constraint and a set	
1 1/20/2016 10 12 Art - Staronmart Dee	scale, diamete DuaraAat) - Salor	
2 3 900	Comment	Type
3.4.4.4		
6 According	Accessible Dissections	(include
5 millighter		idear -
S PARAMENT		Links
7 mil		Ukeer
3 suchaday		User
allowing and a second		Libert
attrached		Most .
acceleration and a second s		Unter
2. whath		Mart
2 minute		Mier
4 Administration	Adversetrately Department	Giose -
5. chargest	and a second sec	thur
magder		Mage -
7 attravplat		Liner-
E wieles		Mart
P Pindage		Maer
		Uppet
S avoilar 2 Con Publishers	Everynic catilitation and screwel agents	Dista.
Z Des. storbury	Drug silents whe are prevident to proton dynamic update	
	Content of the set provided to proceed a set of the determined of the set of	Ciche
	Configure recommendation of the occurrent	
Administration		User
A printy		
2 Actine 7 Solid ex 2 Solid 2 Solid Colorada		Ukar
Fishing be		Unit
S and		1.8see
29 arch-backgo-agam.		User
E auch-ear-agent		User
n Expressional Account		Meet.
SU Worked		Unit
therease in		Oper
24 mate		3.8624
XI weiche		Unit
all all the participants and the participants of the participants		Unit -
17 Eltargent		Meet
2 sectory		Ubset :
th Veria		1.8944
El Danain Camputere	All and stillion and sevent point the scream	0.004
 Donwin Controllere 	All departs post plans in the domain	Clobel
C Donwey Ocasia	Al denser poets	Circled
O out		(North
H Damain Bases	All deriver agent	Gichal
A MERSECT 2PUT JUREA.	 Methods and the 	Lines
Ex Administration		LAGET
Administration		Mael
45 miary		User
BY PacSarve		1.Mart
ST with		Date

The second secon	Car la perte values
A CONTRACTOR	
Contraction of the	
3 Mar	Croup Turnel's arrest
S TRACCOSTI ANDA	Onded Discuss Dans
	Global Correla Users
5 abaptints	
S abapteda	Clobal - Treat Garra
7 stageste	Ondeal-Landing
0 accentive	Gobil Accounting
 a service a service 	Golof- Stream Date:
	Goant- Excel Lister
activity a	Globel - Application
12 182618	(Stobel - Convelo Merro
13 Jeheu	Otobol - It mail Usons
14 adebures	Global Administration
18 induktories	Clobed - Domain Users
til adiabactives	Global - Ersal Usee
17 Acresekater	Glob M - Durvein Admine
18 Accession	Global - Darram Users
12 Atrentester	Globol Estoprint Admini-
25 Administration	Gobel - Groep Peticy Creater Deners
21 Advantagenter	Global - Scherea Agreire
22 Atrentitie	Global: SM3NEICAUNIN
23 Administration	Local - Bad-up Eperators
34 Adventigator	Locid Advisition
X Aminicia	Golden - Dorvale Dietes
20 states	Global - Dorwin Ailmms
27 states	(Sobel-Denain Users
20 alutop	Glokal: Dersan Dann.
25 states	Gobal- Extractional
W alathers	Global - Preak Users
21 abataap	Global - Apptitives
II si-siesy	Global - meenet Access
33 al-alwey	Olobal - Manual Editory
M streets .	Global Accounting
YE skandsick	Global - Sorrain Usera
E slander	Clobal . Tread Users
W domains	Situlat Applicant
2 Aug	Godol - Curvale, Adminis
the sharest	Global - Domain Users
E 2.81	Coded - Sweet Lipset
6 6-81	Clobal- derdfladerin
C ANT	Global-April One
63 date	Wolkaf, Information Systems
44 16-101	Globol - Internet Access
44 (0.00) 45 (d.00)	Global - MatScape Users
an ann	Global - SatSrape Geres Global - Surrain Deem
	Global - Circal Usees
41 4 m	Oldest- AppTOsers
DV all and	Ginlad-Lindeg
第二天 第	Golesi - Dorrein Neme
5 44	Clobal - Ereal Users
S2 abankering	Global - Domain Meets
53 workbering	Giolani - Email Osses
44 al imberito	Globol Lending

- Perform the Data PivotTable

28	Microsoft Exce	- GSNA-User R	lev	iew-2005	-Groups-l	Full.xls	
]Eile Edit ⊻iew Ir	sert Format Icols	Da	ta Window	Help Adobe	PDF	
-	686666		2l	Sort Subtotals			
2		Out 'n paste values	1	EivotTable a	nd PlyotChart	Report	
2	A User	8	Y.	Refresh Data			F
4	10838CCC-2F01-4969-A	GroupTypeName Global - Domain Users			8		
5	abaptiste	Global - Domain Users					
6	abaptiste	Global - Email Users					
7	abaptiste	Global - Lending					
8	acomelius	Global - Accounting					
9	acomelius	Global - Domain Users					
10	acornelius	Global - Email Users					
11	acomelius	Global - App1Users					
	adiana	Global - Domain Users					
13	adiana	Global - Email Users					
14	adiotraphes	Global - Administration					

Data PivotTable

	neer Formal India Data Mindow	2010	OWNOR												1.0
100.000.000	ZEA wood or other	- 11-5110	a	0964 💌	a liar			× 10	11.0	1.11.12	2 2 3	i succ	1.58,2513	a a los	1.000
	The second second second							-						CONC. OF CASE	
AL	Call In plante reduces		-												
	6	E .	0		P.1	0.0	:45	1	1.1		1 L.	14	M	0	
- Mare	Streampellator								-					1.00	
10000000-3"E1-8965-A	Global- Domain Usara														
stoppinto	Ofobal - Domeir share														
abaptisto.	Oldar-Ernal Users														
abagitato	Global-Landing														
actentity	Global - Accounting														-
algeration.	Global - Dowest Litera						and the second second	(CARD)	100	al and a set	Acres 14	No. of Lot	Step 1		3100
Discontinue	Global - Cruat Unice						Privot	rente	ano	TAOLC	nart w	nzane -	step 1	0	
Acettalius .	Ulobal - App/Uppers							_	-		Charles and	i ti mainti			
a have	Obduit: Orienan Litarda											a in deladame			
1 within 1	Global - Ernell Unart						1.1		1.0			to prove second			
a districtions	Global - Advanted ration						1.0		7	D Downey					
a laborations	Clobel Disease Users								y		ouriet en o				
a address of	Global - Drast Users									Ogyater	to all do up	et a fividite	et vision?		
7 Acresidence	Global - Comain Admired														
Advantation .	Oldan - Oreanie Union														
Advancester	Global - E-page to Adaptit						11. 6								
Administration	Global- Cesus Pisles Caistor Owners							10000			****	*******			
Annalsistenter	Clokel, Dinares Advates							9 F.N		Shuth					
Advantition	Godan - Shtirtifiti Advance						1000	Sec.	64	() Fuelda	finer lide	Beef able of	w+i		
Administration	Lotal - Backup Convolute														
Arrestate	Local Advantation						1								
Amatica	Gioka- flowak unert.														
sister	Global - Comain Admina						-								
dialogy.	Olokal-Domain Ukara						1.00				00.9	1	L'INC	5 II 1	-
a alter	Global - Domain Utara												1.00	-	-
shahara.	Giolai - Brail User							_		_					_
white the second	Obdati Fraid Dave														
watero	Global - Aparititizet														
alatao	Gobal-Indemat Access														
alabar	Clobal - Harval Editors														
44000	Global - Accessible														
standards	Gobu-Dover Core														
E al apolici	Golder-Lowest Contra Childref, Frank Direct														
a sector	Carbon Press Departs														

Next

Shierosaft Exce	I - GSNA-User Review-	2005-Groupt-Full als
THE DE YOU I	nert Format Scole Data We	rdaer Help Adige FDF
his middle shares	CONTRACTOR AND A	10. T 1 11. 11. 14 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14
13001000	District (income she dies	un hillen
AL - A	Eat in participants	
A Do Spans works		
2 Ner 2 Ner 2 Statistics 211-866-4 5 statistics 2 statistics 2 statistics 3 scattering 4 scattering 4 scattering 5 scat	Construction Const	PivotTable and PivotChart Wizard - Step 2 o ? X
12 scienting 12 scienting 14 scienting 14 scientinghes 14 scientinghes	Oldar - Applitien Oldar - Domen Uppty Oldar - Domen Uppty Oldar - Administration Dobar - Administration Dobar - Domen Uppty	

Highlight the data table, Next

	- GSHA-Uper Review 2005 eet Rytali Tarik Data Weeks	
	「おいるののようの」ともの	14 14 16 46 100% · · · · · · · · · · · · · · · · · ·
1 41 41 1 (SATE	dig stight for much the state	the part of the local data and the
		And the second se
AL	Ud Trajación materia	
	0	PivotTable and PivotChart Wizard - Ste 🛛 🔀
AND CONTRACTORS	Unicit spellane:	
1009000-3911-4005-A	Godel-Domen liters	and the second se
wheelings	Older-Dunia (her)	
shaptions	Globel - Crual Users	The state of the state of the local field and the first field and
wagtete	Global-Landing	
application	Gobal - According	Citys weights
accession.	Głobel-Cowsła Shera	CEntry initiated
ecotralius	Gobel - Creek Users	
accentrics.	Otobal - App?Vasws	X
akais	Golar-Dawa Utara	CER Proto la unade your Proto Libie-House.
adato	Gobal - Email Users	
addated and	Global - Advandencios	igens. (press.) Creat signs (red
edotreprint	Globel - Connie Uners	And Stationard And Stationard In the Stationard In the Stationers of Stationard In the Stationard In t
adotro/vis	Global - Ernel Users	
Atrimoliste	Bolut - Comon Admins	
Administrator	Globel - Controle Union	
Administration	Global - Choegenan Adenies	
Attentiate	Global - One-g Paten Crastor Corners	

Select Layout

1443944	reet fightal Iook Data Witcher 742 A in 799 A		pia teres			
	A A AL DESCRIPTION	Moder/Andresho		Contraction of the local division of the	CTUSIANI USA	-
. AL	Cull Yr paste relives	The second	110	Contrust your Presi	discass in	and the second
A	COLUMN TO BE			 Brocana divided but 	Chiefe Render	2 X 🗆
ANN CONTRACTOR	Geologil yperhame			bille-dagasterile	645 ····	ALC: NO.
A-030-1116-33338.001		and the second second				
shiplinto	Olober - Domain Usino					
watter	Global - Ernal Units	1000			1000	
wbeek are	Global-Landing	194	1	03.88		
actes allos	Olodial - Accounting	1994		Land a	Cangle of	
acaetelisa.	Global - Domain Using					
actension.	Gots - Presi Uniti		1000	12142		
adatation	Global - Approtein		100	303		
adaptiv	Global - Dowals Usees		1000			
adiena	Olobs - Ernel Users		100.00			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
addretim	Bloba - Adversibilities					(Car
adiatry/set	Global - Domain Usine					- Statement
addressives	Global - Pread Users					
Adviethme -	talokai - Domain Adraka			The second second	CONTRACT OF CONTRACT	
Adventure	Global - Domain Users			199	6 Cenel	
Aprenation	Global - Enterstea Admins	August and a second sec				
Atreation	Global - Geoup Policy Deatter General					
Administration	Global - Schema Admini					
Administration	Clobal - SHEWER Admins					
Altertate	Louis - Bashup Chen blond					

Click and drag the fields on the right to the table image:

Microsoft Ex	ccel - GSNA-User Rev	view-2005	-Groups-Ful	l.xls						
	i Insert Format Iools D									
	0 7 1 × 3 3 - 4 9			a and Pivot	Chart Wizard	- Lav	u = =			
	15 8 2 St B WReniv W	ith ChancesE	rivotrabi							
Al User User User Control of the second sec		r Owners			Constructions front in a construction of the first bases of a construction of the first bases of the construction of the const	ble report by one on the right eft. User (roup)	inter and a second second		10,	
and the second	Insert Spread Tools D	A CONTRACTOR OF								
	37449337				13	8:20 (11)		#38.4.5 A	3.6 2.2	10-4-10e
	1.3 VIA3 713++		12 Townshine			100-0044	Contraction of the local diversion of the local diversion of the local diversion of the local diversion of the	- Phillippine Control		Concession of the local division of the loca
Al .										
			-							_
Chief of Clear .	Ductosten	-		72		10.0		-		
DISTOCTOTION	La Division - Route attack	062.0	/www.stotes	Frag. A	active)	0.045.0	(#7050m)	Ebitur - F	NORCHE MONT	
abageines										
acienatios aclama		1						X;		
a dok vehati				1						
Administration										
Administra	1									
dialogy diamittati										
al-arti		1						1		
al er-								1		
akan akangenter										
#-176						1000				
diam'r ar				100		Deall	4.00	and the second second	1.0	1.1
d-indep d-indep				1	and the second	Page 1	atta - 22 84	-2 342 - # - 122		
4-98:510 #38#7		- 64			Hétikt 🔻 x	and the second s				
#Arcount				this test to the	Poge staffarms					
www.pat				- (198m)	warmen all					
elano elanol ArcSene					ophere					
Acclana										
author backup				-						
makes out										
Bank Darkti										1
Darkit CSP				_						
0382										
CIRL										
CSPA				in the second second	10000					
adpongatus				20276 404	nAode in in					
\$-9418				Long Street Stre						
d-septh:						. 1				
d-pertia										
di Interne										
Donain Admini										
Doniely Questa Doniely Opens										
anistation -								1		
4040278.0										
alter.										
at-anio et-alico										
al another								1		
abanchick selowcard										
al-sector al-se al-segment								-		
- drama anno				1						

1.0.1

Data analysis couldn't be simpler, thanks to the Excel PivotTable !

Adjust column widths for ease of viewing

AL	- 11								
100 C	1.0	10			*	6	н	1.19.11	4
1.						1.			
	10 A								
Should at itsee	Dimplor!								
Liter	 Notical - Ad I 	Stotal - Pel	Oblight Val	Gobii Ap	Octor - He	i-i-behout - Ehn	Gobal - D	contat - the	filled FeGe
1002000-3*01-4303-4								1	
abaptists									
acceletus				- 1					
adama									
a Solveyment									1.1
Active 12 (19						1		1	
Admir/Soli								1	
al always						1		- 2	- 2
al and cit.	1			1					. 1
1 10-10T						1		1.1	- 1
4-201								- 1	
and .								1	
wirebarray.								1	242
Cubles .								1	4
a-bghann									
al-indep		1				1		1	1.
alcoholdy.	1			1				1	11
a story									
1 of antidepurse								1	11
diamport.				1					1
ROBELL								1	
(appress)						4		1	
decitions.						- 7			
auditor.									
harker								1	
Banking and	-					1		1	
Date					1				
Band1	-							1	
1388					1			1	
CSRD									
0089	-							1	
CORM								-1	
CSPS								1	
Advergence								1	- 1
d-personal line line line line line line line lin									1
d-algol/s	-							1	
dumpted	-							1	
direction .									
5-years									
Donain Admins								1	
Datage Quests	-								
Domain Quese	-								
acamater									1
which be at									1
4-37	-							1.2	
diam'								1	1
atalas -									1.1
waters									
demont								1.1	

Make a presentation format sheet similar to the following. Use Edit Copy and Edit Paste Special to bring the groups and total counts forward to the presentation sheet. This time, not only Edit Paste Special <u>Values</u>, but also select <u>Transpose</u>. This will turn the group column headings into row headings and the totals will correspondingly align.

040			_
4	8 C	E 100	
Auditing Firm			
	AnyB	ands:	
Groups		2 Yr	
Pohel Accounting	_	Gistal- Crimale Users	-
Dated - Administration		Cinkol: Proal Users	
Global - App KOst		GISAN-AppTORE	
Closel - App 7. Isens		Clobert- Lending	
Book - Bande' Uhere	_	peal-Advised story	
Oristual - Conscians Adersins		Solid - Donak Admini	
Googl - Doresin General		Lacal- Seatt	
Oldhal - Doreate Usano		Local - Backage Zoanstern	
States - Ethal Users		Jobal - Acclusting	
S 200 - Entre price Admini		Gobal-Administration	
Robal Exchange Domain Seven		Cistul Aprillips	
Stoug - Excitizinge Sanaces.		Gobal-Rendet Unite	
Cobel - Creug Policy Creater Durrent		Sighel- Internet Access	
Dobal - Dentificativity		Sobal- deröfischen	
Hotal . Information Systems		Global Information Systems	
Golgi - miwen Access		Sinkol- Makupi Editory	
Debal - Lending	_	Cobal - Probange Dankers	
States - Marwoot Electron		Global - Natilicage Useer	
Wood - NetScape Veen		Local - Sensi Operatory	
Bobal - Schares Adminis		Subul. Denue Buesto	
Colum Statistics Advances		Solah - Extreprise Alexies	
Jocal - Adventishingors		Clobal - Euchange Comain General	
Jonal - Eachus Eparators		Stokel - Singe Palice Creator Daniers	
oual Uspédramo		Wohat - Schema Norweg	_
Local - Exchange Enterplice Service		Soluti - SMSNSE Admini	
Local Gattle		Local DisAtrene	
Local - Pint Operation		Lack - Suthange Grouping Sevent	
Asid - Residence		Licki - Prix Operatora	
Jonal - Sever Oponcore		Jonal - Restroated	
cond Gravo		Lack Uses	
Grand Total		Chand Total	
			_

A COLORADOR		0	D	. +	P.	G		1	1	1.100	1	1.16	1 N -		1.00	0	11	18.	1		¥.	-14			1	-AA	AB	:40	WD.	AH-	.18
Anditing film		1.4																													
1						_		_	_		_		An	y Ba	nk			_		_	_		_	_							-
Users and Grou	Townson and	Orbei . Mennedann	Add April 1	Water Aurilian	Cond-Dowell	Mont-Denis -	Book Dynam	And Deven	Auto Crist stary	And Powers	Bold-Dictory Deven Serves	Man - Cutange	And Destroyant	Active constitution	Mout Information Systems	Gold - Name	Ocard-Leeding	Ward About	Add National	Nove Grown	Nove-Included	COL PRIME	Local Backag	COLOR Distance	con Publicate	con Ganti	teast Plant	JODE - Papilitance	Cost: Series Dennies	conti-Users	Construct in
RELL 971488	A				1				-	1		-			-	30	100		-		2.24					-	-	-		1000	1.11
foogitiete:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-		-	-	_		-	
edene liter		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
dist nul mi		+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		+	_	-	-	_	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-		-	-	-	-	-	
Active and store Active active Active active Active	_	-	-		-		-	-			-	-		-	-		_	-	-	-	-		-							-	
palaig .												-																			
Amplick :									-													_		_						_	
éant .															-		-											1.1			
A Gell																															
6.00									-			_							-	_				_				_		-	
e interior	_	-	_		_	_	_			-	-	_			-			_	-	_	-				-	_		_		_	
a- 192	_	_	_	_	_	_		_	_	_	_	_	_	_	-	_	_	_	_	_	-		_		_	_		_			

The presentation sheet for the Users / Groups should be set up similar to this:

After this step, the testing phase is complete. The results need to be documented and analyzed in light of the existing user policies and organizational requirements as follows:

- Review the Disabled users to see how long they have been disabled (last login). Determine if the reason for the account's existence is legitimate. It should be understood that the existence of a disabled account, while potentially legitimate, needs to be reviewed (especially if it is given elevated rights of any kind). It would be possible to enable the account, perform activities under that account login, and then return the account to a seemingly innocuous disabled state. Also, the existence of too many disabled users might indicate an issue with the add/delete/change user account process that you may wish to investigate.
- Review the Dial-in accounts and their last login in light of the organization's Remote Access policy. Determine if there is a legitimate reason for the account and if the last login seems reasonable. These accounts allow remote access to the network (thus extending the network beyond its physical borders). Again, if elevated rights exist in combination with Dial-In, the account should be scrutinized.
- Review the password age and analyze the last login in light of the organization's password change policy. Determine if it appears to comply with policy and if any anomalies exist.
- Finally, review the entire account list (usually in conjunction with the group analysis). This review is usually best done in conjunction with an operational manager, familiar with the employee population. Review the log on hours at this time, as well.
- Review the members of the groups with elevated security permissions, like Domain Admins and Enterprise Admins. Insure they are, indeed, authorized the associated access.
- Review the need for the number of accounts with high-level authorization. Most organizations have far too many Administrative-level accounts.

3.2 Review Group Policy Objects and assignment

Group Policy Objects (GPO) are a very powerful configuration structure. They allow policies of all types to be applied to Active Directory Organizational Units (OU). This means that groups or classes of users and workstations can have policies set so that each individual object doesn't need to be fully configured itself. It can merely be associated with an OU that has a GPO set for it. Prior to Windows 2003, it was very difficult to audit GPOs since they are cumulative in effect. A particular user logging on to a particular workstation could have GPOs applied from the OU of the user (and the GPO of any parent container of that user OU) and a GPO from the OU of the workstation (and the GPO of any parent container of that workstation OU). With the introduction of Windows XP and 2003, Microsoft simplified this task by including the Group Policy Management Console.

The Group Policy Management Console (GPMC) is a Microsoft Management Console (MMC) snap-in and provides a single solution for managing all Group Policy-related activities. It also includes a set of "scriptable" interfaces for automating GPO tasks.

The good news is that it also works with Windows 2000. It does, however, require a Windows XP or 2003 machine to run the GPMC snap-in. The only limitation is that the advanced modeling feature is not available on Windows 2000. This means that any user that has already logged on to a workstation can have the resultant GPO reviewed on a Windows 2000 machine. Modeling can be used in Windows 2003 to see the resultant GPO set that <u>would be</u> applied if a particular user logged on to a particular computer- a <u>very powerful</u> auditing tool.

From the GPMC help file is a simple description of this powerful tool:

New ways to do familiar tasks

The following table lists common Group Policy tasks. Using Group Policy Management Console (GPMC), the procedures for performing these tasks are different from the way you performed these tasks in the past, without the Group Policy Management snap-in. Previously Administrators used Active Directory Users and Computers and Active Directory Sites and Services to manage Group Policy. Now you use GPMC to perform all Group Policy-related tasks.

If you want to	On a computer without GPMC	With Group Policy Management snap-in
Create a Group Policy object (GPO) and a link to it	On the Group Policy tab for a site, domain, or organizational unit, click New .	In GPMC, right-click the relevant site, domain, or organizational unit and then click Create and link a GPO here . For more information, see Create or delete a Group Policy object and Link a Group Policy object.
Create an unlinked GPO	Navigate to the Group Policy properties tab for a site, domain, or organizational unit, click Add . On the AII tab, right-click, and then click New .	In GPMC, navigate to Group Policy Objects , right-click it, and then click New . For more information, see Create or delete a Group Policy object.
Edit a GPO	Navigate to the Group Policy properties tab for a site, domain, or organizational unit, select the GPO, and then click Edit . This	In GPMC, navigate to Group Policy Objects , right-click the GPO, and then click Edit . For more information, see Edit a Group Policy object.
	opens Group Policy Object Editor.	Group Policy Object Editor MMC snap-in

		when you click
Link an existing GPO to a site, domain, or organizational unit	Navigate to the Group Policy properties tab for a site, domain, or organizational unit, click Add , and then select a GPO.	In GPMC, navig organizational u click Link an ex information, see
Use security groups to filter the scope of policy	Edit the access control entry (ACE) permission option for Apply Group Policy on the Security tab in the Properties dialog box for the GPO.	In GPMC, click a the Scope tab, a Remove button users, and comp applies. For mor using security g
Delegate permissions on GPOs	Navigate to the properties of a GPO, click Permissions for Authenticated Users , and select the check boxes that correspond to the permissions you want to give.	In GPMC, click t Delegation tab, Remove button Delegate Group
Determine Resultant Set of Policy with Group Policy Results (logging mode)	In Resultant Set of Policy snap-in, right-click Resultant Set of Policy , and then click Generate RSoP Data . Select Logging Mode in the Resultant Set of Policy Wizard.	In GPMC, right- and then click G Wizard . For mo Determine Resu Group Policy Re
Simulate Resultant Set of Policy using Group Policy Modeling	In Resultant Set of Policy snap-in, right-click Resultant Set of Policy , and then click Generate RSoP Data . Select Planning Mode in the Resultant Set of Policy Wizard.	In GPMC, right-o Modeling, and t Modeling Wiza Simulate Result Policy Modeling
Add a WMI filter	Navigate to the Properties of a Group Policy object, and click the WMI Filter tab.	In GPMC, right- New. For more import, export, c

is still used to edit GPOs and is opened when you click **Edit** in GPMC.

In GPMC, navigate to a site, domain, or organizational unit, right-click it, and then click **Link an existing GPO here**. For more information, see Link a Group Policy object.

In GPMC, click a GPO or GPO Link, select the **Scope** tab, and then use the **Add** and **Remove** buttons to control the groups, users, and computers on which the GPO applies. For more information, see Filter using security groups.

In GPMC, click the GPO, click the **Delegation** tab, and then click the **Add** or **Remove buttons**. For more information, see Delegate Group Policy tasks.

In GPMC, right-click **Group Policy Results**, and then click **Group Policy Results Wizard**. For more information, see Determine Resultant Set of Policy with Group Policy Results.

n GPMC, right-click **Group Policy Modeling**, and then click **Group Policy Modeling Wizard.** For more information, see Simulate Resultant Set of Policy using Group Policy Modeling.

In GPMC, right-click **WMI Filters** and click **New**. For more information, see Create, import, export, copy, and paste WMI filters.

11

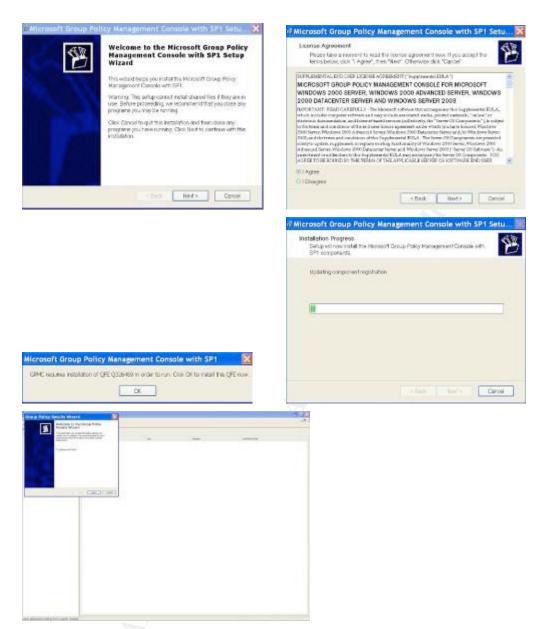
A review of the GPO applied to selected users at selected workstations can be undertaken using the following steps:

- Use the GPMC to access the user and workstation
- Print the result for documentation of the test
- Analyze the resultant GPOs applied in the area of concern (security, internet access, etc.)
- Report on any suspicious areas

Preparation:

- Use a workstation or laptop with network access to the domain with Windows XP installed.
- Select the representative users and workstations to be reviewed. This selection should be from selected groups of users. The intent is to see if a user with restricted network access has the correct GPOs applied.
- Download and install GPMC from the Microsoft site (certain XP service packs may be required prior to installation):

¹¹ Microsoft Corporation, <u>Group Policy Management Console</u>- Help Text



Data Collection:

- Start GPMC (version 1.0.2 used here)
- Select the Domain
- Select a user and a workstation
- Save the resultant file

 Print and review the output (display with browser) 	rowser	y with br	lisplay	output	the	review	Print and	-
--	--------	-----------	---------	--------	-----	--------	-----------	---

in related as 1200000000 0 10 11 day					Party of
and the second se					1
Sanak			at cauters can		
Data -			DC/Jones 6404c		
Desired			1922200211120940		
Pluting			8/12/2000-122/21/PM		
3 or Franking			1940 Harrel		
Company Records			21(47); 21(surrol)		
dates to			CRUPTHERING 1102547 4000600612		
(P4 July			build		
04.c					3
Location	Enterand		Link Wolm	Fats	
(#)	die .		Factor	of designations com-	
The Reset is defaulted in the skew of the IPS					
and A Bring					
The ordinant in this GPD can only waity to the following p	and the local land land the				
	reader, where and computers.				
Name AT ALTHORY Visiter Ranklines					
d Filosog					
WM Fibra Rose			Mana		
Entrolation			Net goárotái		
leader -			and the second		
	Die DED.				
These proper and state have the specified possimilar to		The second se			
Name ICOuntrAffici		ed Parminenes Ricza colora acciliantante		Educied Up	
SCOmposition SCEntration Advised	1.0.0	Brigs, ober, socily enable strings, ober, socily, emaily,		in .	
97.14.79 IEWY Malerskowickare	Const.	per Servity Mentgi		14	
STALINE STOCKING	14.0	drags taken multi-month		16	
nto Collipsoite Facility					
ntere Sattinga					
acually Sattings					
Account Policies Placement Policy					
Police			Setting		
Enforce partnershiftings			Spontaret amontoned		
Presspectational spr			Trans		
Principensadaye			Oden		
nite an owned with			A character:		
Paraula har and complete request and litro paravals airgonomits analytic			Overheit Overheit		
			And a second sec		
Accessed Policies/Veccast Linkowit Policy					
Folky			Setting		
Account tableur dealers			1840 witake		
Server below thereit Read accountlicking (particular			Neodelogenationeis 1440 alugus		
			Headyle		
Account Policies/Earlinese Policy					
Poles			Sellera		
Extense war toger verster door			Ended		
Finance Dates to projectate Researched to par Kolt			RD means Kiteren		
Particulation to use Rear proved			T chan		
Figures Advance has compare whith a referring devi-			Tomate		
Local Pelicen/kallt Foliop					
Policy And accentrace-methy			Section Section		
			Contract Lagran		
Local Publics, Transfer Splines					
Butwoit Society					
Fulsy			Sulling		
Second receip Trace legal sheet legal from more			Dusting		
Public Kay Policies/Nationaclinesi Soltings					
Fuke			Selley		
Folia Gentralitation scienciale			Support		
Foreversed unificates salate product reliance, and entire	erested cells and		Bogest		
Update collicatio that was collicate resolutor	10000000000		hunor		
Public Key Federard Propping File System					
Popular					
Palap			Lang .		
Allow una cle encode lier units thronomy 14 Surface (201)			Indexi		
			2.20 K H L L		
Collinere					
beautil To	board ity		Repeation Date	Intended Parameter	
Setemate	Addresson (TLOUGHT STERLING	Pite Prevaning	
For william a monoton where individual safety Group Pole					
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Public Key Policies (Tracted Hard Carld Sufficience Automation					
Properties					
Palar			Serg.		
Allow index to relate you and conflicting automatics Educational			Trubles		
Client composition from the following methods increase			This Party Non Gerllin And Institution and D	Teph effox Certification TryTholise	
To private tell and have sub-antipation of across and compares	German were the following plotters:		Represent rolenter Commonwell		
Codguestier (Enabled)					
where Scholage					
manie foriednine Leeven					
Elsest Installation Wased college					
			10/101		
Poleg			Some		
The law Value			Unaided		
Tacker Tellas Recar Secu			Oracled		

This is an example of the format of the output from the tool. The actual result will contain the GPOs applied to the particular user and computer being reviewed. It is important to understand the sections specific to your purpose. In this particular case we are reviewing the Account Policies being applied.

A review of the resultant output should include looking for any delegated administrative control or elevated rights (allowing the ability to enable and disable GPO inheritance). Look for anything that blocks policy inheritance also. If a mis-configuration, or intentional deny of policy inheritance exists, it may allow a user to perform actions that the higher-level Group Policy is preventing. This is a double negative: we want to insure that the policy is being applied to the lower level object, therefore we want to make sure the policy inheritance is Show when the state of the stat not denied.

3.3 Review Password Strength

There are several tools available to assess password strength. @Stake's L0phtCrack[™] and Open Source John the Ripper are two very popular password "cracking" programs. It is essential that it is understood that the legitimate uses of these two programs are twofold:

- Assess password strength so that the result may be documented, compared to the organization's policy, and appropriate remediation steps put into action.
- Recover lost or unavailable passwords when no other alternative method is possible.

@Stake's LC4 was used for this testing (LC5 is the current version). In addition, there are basically two options for assessing password strength. The program can be set to run against the Windows Domain Controller directly, passwords can be captured by "sniffing" on the network, or the "SAM" file (Windows Security Accounts Manager file) can be captured with a utility program (pwdump3) and assessed offline. *Regardless of the method used, it must be assumed that the passwords have been compromised and appropriate actions taken.* The utility program is method in the testing process used here.

A review of the password strength can be undertaken using the following steps:

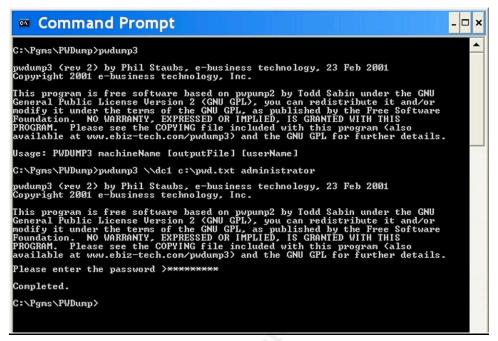
- Review the organization's Password Policy (if it exists)
- Use a tool (pwdump3) to capture SAM file from a Domain Controller
- Use a stand-alone computer with L0phtCrack[™] installed to perform the password vulnerability assessment
- Export the resultant "cracked" file
- Organize the output for ease of analysis
- Prepare presentation of user list with "cracking statistics"
- Prepare summary presentation of "cracking statistics"

Preparation:

- Use a workstation or laptop with network access to a Domain Controller
- A Domain Administrator's account and password must be available for the utility used to capture the SAM file.
- A secured method of transport and, preferably, a secured stand-alone workstation with the L0phtCrack[™] program installed should be used for password vulnerability testing.
- Download the pwdump3 utility
- Insure a copy of Microsoft Excel is available for the analysis of collected data
- A fairly advanced knowledge of Excel (or a staff member who can assist) is very helpful.

Data Collection:

- Run pwdump3 as follows. The resultant file in this example is pwd.txt in the root of C:\



- NOTE: If the program fails, the most common reason is that the administrative share (ADMIN\$) has been disabled. Several "workarounds" exist (including creating the share, running the program, and deleting the share), but are outside the scope of this document.
- Secure the file (in a password protected zip file, for example), delete it from the local machine, and transport it to the computer where the L0pht program will be run.
- Place the file on the L0pht computer and Begin a new session

Constant Con		alets.	Golden (14 - Rooked)		ale to
The year line	* 10 11 12 22 22 21 21 21		(in the lager point for	Indersend 4	
Derenant Editional Derenant Sal			Tores Neuroficio Anna Super- Neuroficio Anna Super- S	Attfanner it sfikkroot Heise	and a state
			Upor the D	ngothranna is ndólové krizandz ta nadž.	Annexes Acceleration Accelerati
Deute a rise LDA raction			a) Replacement ten PuttinP papel la		
#14 5010V	Mitheate 104	N.E. HITPS	#114 SC(1)	Midnate ICI (Basic	N 2 110m

- Import the file

Complete La Calendaria de C	alf0.83	Gates a C	A PROMIT				10	
NUMBER A TON A MANY YOR OF A		1450) 128 857	De A mati	N HE HE HE H	19 4			
max Libertone LiMEnumer Life State Present Like And	Contraction of the	(Come)	Uprittee	[MEsmot	Life #Table Parcent	e 201450 4	No. of Concession	
		1.444	Address and Addre	-ready-	, read.	Fischer State (1996) State (1996) Internet State (1996) State (1996) Internet State (1996) State (1996) Internet State (1996) State (1996)		
Loss of California State	1000	POSO4	fires olar 2000 3.52 Sawday	"rang" "rang"	"mang" "mang"	NOCCONCINCTION	1000	
Class	Alex Leffs	COCK	-00 (394 3.84 (383 3.00	"rang" "rang" "rang"	"ming" "ming" "mang"	420213809.2156.3440.1 10000188000000000000 10000880000000000	Alter L	
or	Marsin	1000	holes foliare	'reng"	send.	HOLD AND COMPOSITION OF A DECEMPION OF A DECEMPIONO		
Halana (20+5-0		0000	Sare Agen Accesse TOR TOR D-CR-SO/NICE-ACCOUNT	"saing" "saing"	"story"	4501980-7148.3×61 0000000000000000 6001980-7148.3×61	10101_00 md11m2_00	
Recipe [street 1 2] Lane	b. CRUT	500	aluptide Histologie alabodop		-	ELECTRONIC ALCOLUCE 10000 (2012) Standing 114734 (2012) Standing 11474 (2012) Standing 1	h.	
	stake	1000	arianti ginati shanati			BRENDUZZYMBELNEU SCHERTERYMCZOWE KNERCHERCHERCHER	sta	
		<u>,</u>	aforsplan gebreen	_	1	ALL RECEIPTION OF THE PARTY OF		
AND STATE TO DO TO DO	N.E 11976		O OV	1Ge	ii F	Citrate LC4 (Balle)	N.E. 10	

- Set the session preferences. Here is where you can try different settings to see how they affect the speed and cracking capabilities of the program.

May Jugor. Senior Br	No. of Concession, Name of Concession, Name of Street, Name of Str							
teo lerries	TO ALL MUNITY I	化肥肥 网络		and the second second	100.00 miles and 1	Inter all International	100	
Ques likula.	MEamort	Lit statis record	281450 4	Contractory of the	A DEPENDENCE AND A DEPE	Artist Statistics	1	
Qualees.	1 10/22		FIGURE NUMBER OF THE PARTY OF T	THOMAS TOTAL	Carrowy Deals		The house	
law 044	11108-001	"riking"	10000010000000000000	seat size on the	S Doblec	Remembers	CHICK SHELL CONSIDER THE CASE	entimal.
8426.			ATTORICOB (TTAISAD)		 Bisisisis (concerning) 	Contraction of the second states of the second stat		
estimized.			125274887199647711		 The Dis Nonsp Diasti kom 	to participation that an file come as the wards fallent in the and and \$400 flat respects participation.		
et	"1849"	"tiwing"	100000100000100000100	in succession in the local division of the l	Contraction of the second seco			
(lease	1484621	, name	DOCCOMPOSITION DOCTOR	har elmon	Decisionary Grune Rysteel Con	d.		
PENEL .			60071007171963H01	- 04 Eh (he 04)	F Epileni	- + Those on it seems		
	Training?	"mining"	10010100010000000	Jace Lefti	1			
1.84	"(easy"	" 100 mig/	PERCENTROL PERCENTER	3700.6	96	Daarter trapped	1 St. 12	
1383	718492	"nearg"	1000000000000000000	And Manhammers	Hannahara	F Generative spherosters trust		et
2.02	"relating"	"search"	Internetional	Anterior	The following them to be	Claim here to suppress that are response of the odd		1000
Inches			NOLF ICAMETIES IN	A CONTRACTOR OF A CONTRACT	 An applie it the party Yell weak descended 	nto met an Transfer in Inseriaal". The task is had an	Sec Diff.	int Tes
Survey Survey	2014 T.B.		8102368810224030 425238013398239401	STATE OF TAXABLE PARTY.	1 an entrance			and the second se
138	"raing"	"sking"	INTERPORT OF THE PARTY OF	totol.unets	Inverferentiek		and the second s	5 Car
1.1	Trains.	"mining"	1000709000000000000	andited upon	1 St Eugeni	Distance for		110.010.00
	CLAUDER		40507398012704636403	A REAL PROPERTY AND A REAL	a capes	(= 2 set) (430719801270834462	and the second second
wheeling		1.4	DisPONDOV1000AD0	A chick C.DEP	1 2		DisPORTON/LARGENET	1.0
1678mile			1205301022672558401	International States	di la	THE CONTRACTOR STOCKED	12030102012559401	Deprisonen
ularbeirg-		. *	Transformation maint	Contraction of the local division of the loc	The Ball State Care and	to parents for some in the marches specia	n and a company of the	- Continent
wireship)			BELGARDINGSUTT -	and the second se	If price Changers Let. B Inside	and compared and the "scholl helds" or "scholl helds". The	Increased and a second second	-thread and
stants shark			SNEED SECOND	and the second second	 There is a set of the set of th	the starting processes in Type of a manufacture of other space- time starting.	BYROL2MEEDED SNEEPECOVE	Contraction of the
stanley.			KINPECORP 647/07027231	stake		and the second s	EXCEPTION NAMES OF TAXABLE PARTY OF TAXA	Btak
ufcitadas.			STOCODER BIORDSSEWAD	1 I manufacture in the second second	4	2 Dec	17220006E 87002555.440	
at extent		1.1	PERSONAL PROPERTY AND ADDRESS OF ADDRESS ADDRE		3		Terrere and the second	
		10 14	Officiale LC4 - ID with .	NE ITTE	100 CO	Gina	Tobate104 Date.	
	4		Constitut Date:	alters)		Cone.		
	And Andrew Street		CONTRACT DAME		A CONTRACTOR OF THE OWNER			
and Barbings Free Falles	Advestigations	- Contraction	JEFFA (*)		Contraction of the		a javas v	
A Distance of the second		and the second se	arrage a		Second Local Division		ed programmer a	
A Distance of the second	hinter and a second		investo investor sustaines investor sustaines	alet st	Contraction of the		an and a factor of the second	.sl.
Anna Anna Anna Anna Anna Anna Anna Anna	hannerarj	-	A Strange A	10 x	Discourse in the	n Ministranov Internatio		
Anna an anna an anna an an an an an an an		-	Internet Internet of the second second attraction of the second	alet st	Densey Dest			
And a second sec	<u>homonari</u> sharan 10 an in san a fa	-	A Strange A	alfi S	Provide a second	na Mating Lanca Internal Discontration of the states of		
and the second s		antonen.	Januari Tracia (1973) 2-dal Intel Monto (1974) 2-dal Intel Monto (1974) Monto (1974	18.81. 19.00 - 10.00 10.00 - 10.00 10.00 - 10.00 10.00	For any factor of the former o	TE 27 (27) Entering	at Invania a Invania Invania a Invania a Invania a Invania a Invania a	14
and the second s	<u>homonari</u> sharan 10 an in san a fa	antonen.	All Hand	alfi S	Provide a second	na Mating Lanca Internal Discontration of the states of	The first of the second	100.00.00 100000000
Carrier Contractor Internet Contractor Desting Contractor Cont	Hamman, at j	and a second sec	Dentagi a Tracia programa da la composición al francesco de la composición al francesco de la composición de la composición de la composic	A DAL	For any factor of the former o	TE 27 (27) Entering		16 1000000 1000000 1000000000 1000000000
en e	htteraput interactive and an interactive and the Web Main and a second and interactive and a second and interactive and a second and interactive and a second and a second interactive and a second a second and a second		All	A Dia and a second second and a second second and a second second and a second second and a second second second and a second second second and a second second second second and a second second second second second and a second sec	For any factor of the former o	A Construction of the second s		14 1977 12 10 12 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 1
an Entran Fra Aven Instrumento Dato Dato Instrumento I		nest tage a to	2014/00 P 2014 P	A COLOR AND A COLOR AND A COLO	The second secon	A A Control of a state of a sta		in internet in
and Endow Fee Annual Defension of the Annual Defension and the State of the Annual State of the Annual State Register		nanthéopra de nanthéopra de nanthé	All	A Dia and a second second and a second second and a second second and a second second and a second second second and a second second second and a second second second second and a second second second second second and a second sec	The second secon	A defined transmission A defined transm		14 1000000 1000000 100000 100000 1000000 1000000
Define and the second sec		nanthéopra de nanthéopra de nanthé	2014/00/2014 2014 2014/2014/2014/2014/2014/2014 2014/2014/2014/2014/2014/2014/2014/2014/	A COLOR AND A COLOR AND A COLO	The second secon	A A Control of a state of a sta	1 (1946) (1947) 1 (1946) (1947) 1 (1947) (1947) (1947) (1947) (1947) (1947) (1947) (1947) 1 (1947) (19	14 1000000 1000000 100000 100000 1000000 1000000
E des anti- meno fant a ser a		nanthéopra de nanthéopra de nanthé	American Ame	A Dia A Dia	Control of the second s	A defined transmission A defined transm		
E des anti- meno fant a ser a		nanthéopra de nanthéopra de nanthé	2014/00/2014/2014/2014/2014/2014/2014/20	2.01.5 4.01.5 4.01.5 5.01.5 5.01.5 5.01.5 1.	The second seco	A Control of the second seco	A A	A STATES
And a second sec	Remember of the North Handler of Descent of North and North Handler of Descent of North Descent of North Handler of Descent Program Management of Descent Program State	nanthéopra de nanthéopra de nanthé		A Dia A Dia	Contraction of the second seco	A Contract Interest Inter		
Entrance of the second		nanthéopra de nanthéopra de nanthé	Enclosed Control	ABA	The second seco	A Contract Interest Inter		a series
A description of the second se	Research of a result of particular of the field for which is a result of particular of the field for the result of particular of the field for the result of the result of the field for the result of the field for the result of the field for the result of	nanthéopra de nanthéopra de nanthé		2.01.5 4.01.5 4.01.5 5.01.5 5.01.5 5.01.5 1.	The second seco	A Contract Interest Inter		la serara sera se
In the second se		and Sector and	Enclosed Control	ABA	Contraction of the second seco	To description		la serara sera se
An Endow From Party Define Define To Define To Define The Define T	Research of the second	and Sector and			The function of the second sec	A Contract Exercise A Contract Exerc		la serara sera se
worth The set or reports second that the field and the field and the field and the second to the field period the second to the second the second to the second the second to the second the second to the second the field second to the second the field second to the second the second to the second to the second to the second to the second to the second to the second to the second	Element of e	north forest man (the states The states of the The states of the The states of the The states of the states The states of the states The states of the states The states of the states The states of the states of the The states of the states of the The states of the states of the The states of the states of the states of the The states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states		ABA	Persona a series a series and a series of the series of th	Control of a second a descent statement Control of a sec		All
A Leonard Leon	Element of e	north forest man (the states The states of the The states of the The states of the The states of the states The states of the states The states of the states The states of the states The states of the states of the The states of the states of the The states of the states of the The states of the states of the states of the The states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states			The first and the first of the	Control of a second a descent statement Control of a sec		All
Andream Constant and a second and a sec	Element of e	north forest man (the states The states of the The states of the The states of the The states of the states The states of the states The states of the states The states of the states The states of the states of the The states of the states of the The states of the states of the The states of the states of the states of the The states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states			Persona a series a series and a series of the series of th	Control of a second a descent statement Control of a sec		NE IN AU AU AU AU AU AU AU AU AU AU
Andream Constant and a second and a sec	Element of e	north forest man (the states The states of the The states of the The states of the The states of the states The states of the states The states of the states The states of the states The states of the states of the The states of the states of the The states of the states of the The states of the states of the states of the The states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states			Persona a series a series and a series of the series of th	Control of a second a descent statement Control of a sec		All metal of article of March 10 March
Control of the c	Element of e	north forest man (the states The states of the The states of the The states of the The states of the states The states of the states The states of the states The states of the states The states of the states of the The states of the states of the The states of the states of the The states of the states of the states of the The states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states of the states of the states of the The states of the states			The first film of the second s	Control of a second a descent statement Control of a sec		Li metalisi 2.2 Metalisi Metal
and the second s	Element of e	north forest man (the states To state and the To state and the Top (the states)			Persona a series a series and a series of the series of th	Control of a second a descent statement Control of a sec		All metal of article of March 10 March

Begin the Audit

a view joport	Dever 241		-			
al 📬 set 🗖	(hept hed)	- 14	10.1	1 19 14		
tera k			1.0	STIS PRINT		DECEMPTOR COLD
					Encloyer Supervise	
	or Autopential			. (Held).	1000010000000000000	
			1.2		ATTORICOL (TTASADO	
					125573818719964C1711	
				*196900 ^{**}	1000001000001000001000	and the second s
	Deane Dates			" mitsing"	100000100000000000000000000000000000000	and the second
	and the second s		- 1 C -		\$1071943 (704 Suit L	1000000
			1.1.1		82021280412126K3H401	Late Left
	12984	TYNNS"		"mining"	10000110000100001100	2.000
	1.84	T184127.		10000g7	PERCENTROCOMPONENTS	1 Contraction of the local sector
	1382	718492		"nining"	1000010000000000000000	
	2.02	11000011		"watering"	300000000000000000000000000000000000000	Annais
	index.				NOLD SCAME READS	
	bilinte				FEE3685 (E251730	Party of the local division of the local div
	Same Agent Account."				43073601070423w01	
	138.	"Here's		"teking"	HOLDSHOODSHOODSHO	total_otegg
	Million and and	Traing".		* mining *	1000101000000000000000	10031202-02812
1 0	DEMONSAGES				425073980907098364632	1 100
	within		1.4		15-191030-19603-0D-0	1. dkos 6. 04.04
	trikining .				10000010206721584401	Increase of the local division of the local
	ulated to				hard-brokenneser.	-Collingual
	viewick .				BUSSEDERET	- Contraction
	mark.				BRITECOLD MOBIL MEDI	- Interactive V
	sheet.				SNEREMERODAL	10000
	stanley.				\$100F007089 (6-0/10 0807031	stake.
1 3	address from the second		1.8		1720/00/8E #1006/355.w40	
	al tratem				SECONDERVISION OF THE OWNER OWNER	
A biological B					310	

-max	UNITERA	IMPROAD	Lit	STER Provent	281450	Concession in the
	2.5-# unitable	10000000			FileMOPD SublitU4	-101.85.104
2	Tasket .	TOBJAST .		*1969rg1	100000100000000000000	
2	tires.	III WA		circe.	#1000000011MSA02	
2	relate	1007751E			ISS/VARIA/IPRACTICE	
2	D9812	"renerg".		* Desido*	1000001000001000001000	5.11
2	3.42	"realize"		* minutes/*	100000100000000000000000000000000000000	0441411010
2	Transform .				\$1071967 (709 Suit L	Asse, slain
5			12		420273860F3756K3H40.1	tate Is
2	12984	Trains?		" mining"	10010010000000000000	
2	3.84	Treesengt.		10040g1	PERCENTRAL CONTROL OF T	
5	1983	T184001		" history"	100000000000000000	increasi he
2	3.00	Proking**		"weeking"	Januaran Constanting	Participant and and
2	insulant.	BACKLP .		indus.	NORTHCOMPTENDED.	Mars.
2	BULETY	NRCHIME.		MARKING .	FEE AGE 10251730	Provide State
2	Same Agent Account.				43075801071423-401	and the second second second
2	1388.	"reading"		" tokang"	HOLDS TO CONTRACTOR	025.01018
2	323	Traing".		"mining"	100070900000000000000	10031002-028
2	D49-10/MCLACOBE				4050759801070423w4012	A COLORADO
	alualda		1.4		DisPatron Manager	2.00
2	minimum				1000001020070158+401	Theorem and the
2	olaboho	101.9v		adimu .	Transformeric and the	Contractory of
1	wire shaked	2077509			BELGGED FORTH	COMPANY OF A
3	mail	FOC-IDENING		confidenced II	INTERCOMPANY AND A STATE	· Statistics
2	ulush.				SARRESTECTIVE	stake
5	at evelop-	U.KCENTE		accessift	100102089-04202231	BIRK
2	ufficiend-bea	101-81	2.8	dire.	1720/004E #YORDSSCHAD	
	addresses.	19891		and a	PERCENT PERCENT AND A	

Scroll up and down until the majority of the passwords have been cracked, or the time permitted has been reached (this one ran for approximately 4 days):

	on Terror Feb					RINI H	
72.0		MPanet	0.3	ATLM Passered	Latrice -)		
-	Advines	PIGEWORD	1.02	passod	CARDOF/COURSELAS	apene total	
	Gast	"wining"		"mealing."	00000000000000000000000000		
	Virus niety	PECANPIC	1	pecarpia	6F980800866F74154403 5043TN00479782401730		
	C5R2	"mining"		Presenta T	200.00000000000000000	8.853	
	TLR2	"Hung" RCFP	÷.	* missing *	4262790000000000000000000	STATE PORCE	
	Supervise	REFR	÷.	ntip efic	\$282F98801CF24E3642-0	11es elsises na chi the ce sies ksti	
	CSFM	" which g *		*reasing *	000000000000000000000000000000000000000	2.9302	
	7,54 (SR2	" minuting "		"metrop" "metang"	300.00000000000000000000000000000000000	THE REPORT OF A DESIGNATION OF	
	n.x3	"etting"		"weating "	202080800000000000000	current test	
	Ballap	840,810		bactup	1640219C3998080448 9F95879680602591730		
	ArcSend Saro Agent Account	ARCSERVE REF#		accesse wito	4050998040914834401	Summer .	
	CSR	"mong"		"mang"	000000000000000000000000000000000000000	tutsl.users	
	TLN EXCHISE PUTCE 4000UNT	"elong"	1	"retaing"	00000000000000000000000000000000000000	soliter users	
	ub opinite	120645	1	120665	CD:2F0003008710923640.0	12.5554	
	mkindonity atarikedes	VELLOW	٠	foor-	13E301039E2199403 Ft4F314008E0330403	Calling Street of Lot o	
	alignedick.	TREN1987	*	selan Ser/1957	50C734463830EE987C3	a Doheren a ritera	
	elanb	POOHREARIE		publicart2	1819/ED222145801/54F3F	of Barris Ports	
	aliciet aliciet	D'9ID664 SACCESS7	*	diadaki ascent?	S243E925019F9EECCCAVD EXEFECTIVESH/VEIR/FC37	stake	
	advergilers	10HN		plan .	W20488F IF HE FEE AAD	5.9421997	
	Use Name	LIN Passion	s la	S MILLIN Financial	URBAN .	Inclusion and the	
1	it utor	HAPER .		PER.	181833850E29ED48440	seret total	
	stanical.	ALM/64		alera	28640C238E79E29CAsD	eorite done	
	Fedire akatory	PEOLINE BUSCH	1	tedine brack	NEW DESERVER STAND	8.8991	
	duanted	SWEETPEA	00	Interdet	TERMASTAD SCIFERD 07584	0.0384	
	Adjumption strategy	SHOWNCERE DUNKE	-	dare dare	204/07/8853819CD/9668 3945999CD853629A403	STORA DI NORTE	
	minut.	GRACE	2	pere	4854115252952848440.3	Liss elapsed of Oh Om Of Sist Lets	
	Recep	RECEP .		wore .	18/FC86561985A03M01	in dans	
	acquise selection	HSES4053 HUATINE		tubania turning	1F34660DF3230EA13640 SCEPE F7000KB BERG440	Datrett tert	
	appendi	REPLOS	÷.	angacasi	\$852000651090 ⁻ 3440.1	herrole-	
	al interv	PASSWORD		that.	7942 5202 9407 K220420 ESOCACE7219838204438		
	ek techne sek ingutan	INVILEY		perroval halep	22989443913080344403	BARRANT.	
	whatepole:	BABYHUL		below	AR1604517018309760F	LOINAUNNER	
	diambin.met shawicot	CLODIS	1	clacks.	BER1256, THEREMARKS DADERSTDRESS TOREARDS	malling_uppra	
	author	44/01/081	1	audim1	81889800F#772xF1FC2381	2 . stone 84. 580%	
	Bark.	HOD PSALMS33	۰.	1.0	16883003E1985/EMD SESISTIOD 9838801448	- Charles Contained	
	ville_ADMIN	VERITIRS		proder 3335 VEPBITAS	SUDTICIFARRENAMOS	a Common	
	minakada	HOLIDAYS		Includinge	073744C490508F0 3650E2	a free form	
	showard dimi	WINTER OUTSACK	1	vate: suback	0813440570738148440 2079100619738646440.0	stake	
	0010099.0	THUSTE	÷	body .	C314881C708030194400	1100000000	
	C TOR Name	LM Pastokid	130	NTLM Passed	CMNas	DEDUCTION OF STREET.	
	report	80007		Inchip	278Fx1a320AdFedEadd		
	sharpost Backsp.mm	NULTR	1	nile: efic	SCIEDC/S70HCS75H4D: 42527980010704E344E3	war sta story	
	distant	CORVER.	2	cante	taractDisagestSeparati	8.892	
	105	"mining" "mining"		"misding"	000000000000000000000000000000000000000	Martin Summer	
	alidealdy	BM-97		"excerng" Lato?	COMBINED KETAKORCAANO T	1365 slange	
	accendia	INTRAREDITANTEM		howeddation	0272507456250513804	Sa Dh Om Dw Slam Left	
	akati skipp	LEE12638 P5143F0		8w1208 2x14010	CHCHCARRENTISTINGFF17. SA3228039F852FADA403	arcka	
	maine	BEADIES	÷.	besaltes	1011E18F%44040864421	succest seat	
	date	OPEINS		breig .	DE4CM/000000000000000000000000000000000000	Levisite.	
	accendius Internet	PYLEZSIA "allowing"		2(4034) "maxing"	541PD47CP54053485C50 000.00000000000000000000	Contraction of the second	
	ehid .	SHANEM		theat	OF STANSFORGED OF COMPLETE AND I	C. Salast	
	alangkons versidar	80208 RDFP	1	beack selp	89/1F00/# 3640/00/5640 6262F9960/07/26613/4/20	totsl_userg	
	Admitish	"atong"		"maning"	02008000000000000000	Maditine Laters	
	Bask t	HSET		1.41	09FE1000048184A03	84.590°	
	dicigniti metri-bacing-ageni	SUPPAI PASSWORD		faque: hervezant	1620050454540612AA02 E3A0340E21E260EXITAS	a true ton them.	
	eucly-say-agent	REFIP		(Hip	ADROF SERIES OF DID AN ADR	a load of	
	euclysau-agent mkieboriey	REFIP CONINS		onti	0C18081D00/308E3A4D1	a Conserver a Galacter a Galacter	
	eucly-say-agent	REFIP			DCTRRED00700E2A4D1 C4586A701018E206A4D1 E52EACET419K04204A30	stake	
	euch-sau-agent nkisberley dirvers	REFIP CONVIS GROSS		condi- pore password show(201	DC18091D007208E3AAD1 C4586A201D195596AAD1 E55EACE14139596AAD3 960 3304877216 8986 999	stake	
	euch-sau-agent nkieborteu deinvers nkiebeu	REFIP CONVIS GROSS INSSWORD		condi pore pacewood singu(R1	DCTRRED00700E2A4D1 C4586A701018E206A4D1 E52EACET419K04204A30	stake	
	sub-ta-aget nisiboliy dimes nisible ding ding ding ding ding ding ding ding	REEP CONTS GR055 TMSSV010 STUPDOR STUPOR CONTS CONTS CONTS		confi porr pacrocod socaCR1 Louis MTLM Paconad "nicolog"	DCTREPTD09700RE24421 C4566A2012-65065A421 ESEACET4156-05-224438 RED 2008F7/27E ENDERS SECURIES WITHOUT ALL T ENTHERS D000000000000000000000000000000000000	Stake	
	such-sur-agent ekinbolity diverse rakituleg akituleg diversita diversita diversita klashitule Subsitut Subsitut	REFP CONINS GR013 INSSW010 STUPICISE STUPICISE CM/Mercanet		condi port patrood piced biod SULIM Patronic SULIM Patronic SULIM Patronic SULIM Patronic	DCTRIPTORYZORCZAWŻ CAŚKAZATOPISTORCZAWŻ ISZEWCETYTNICH ZDAWŻ ROTZCHCTYTNICH ZDAWŻ ROTZCHCTYTNICH ZDAWŻ ROTZCHCTYTNICH ZDAWŻ ISCHWICZ WYTNICH ZWAŻ ISCHWICZ WYTNICZ WYTNICH ZWAŻ ISCHWICZ WYTNICH ZWACZ WYTNICH ZWACZ WYTNICH ZWACZ WYTNICH ZWACZ WYTNICH ZWACZ WYTNICH Z		
	such-san-agent exist-body dimmes nikildag alama dimana dimensi dimensi dimensi Adamford Kank 1 dingenis ensih beckup agent	REFIP CONVIS GROBS THESPORE THESPORE THESPORE CARPortment CARPortment Carport SUPPORE SUPPORE		confi pose pactword septR1 bad \$200 Passessel 'relating' half sept1 pactword	DCTRIPTLORCOGE 3AAC LASEAGAT TATAFCOREAAC DSSEACT HTS (Se2AAL3) BED 3304 F727 E198 F83 SCC 975 PC 9719000 444, 3 SCC 975 PC 971900 1444, 3 SCC 975 PC 971900 1444, 3 SCC 9719 PC 9719 PC 971900 1444, 3 SCC 9719 PC 97		
	subvab-sged skieboday dirense skiedog dirense	REPP COVINS (MEDIS) INSSW2RD INSSW2RD INSSW2RD (MPressure) NSST NAST SLEPN NAST SLEPN PASSW2RD BEFP SLEPN		confi pore papered sept781 total STLM Paperent feating* halt sep31 permost adp	011891 L00X208 24401 (245623112452554340) (252524714159525430) 803100477214939525430 8031004772149395353 (24505497050000000000000000000000000000000		
	euch-sa-sged aktobolay dirvnes aktobolay dirvnes dirvn dirvnes dirvn dirvnes d	REFIP CONINS (MADIS) INSEWDRD INTERNOSS INTER IN		confi port paperoof sept781 taak "miting" half seps1 parecoff econfi	DCTRIPTLORCOGE 3AAC LASEAGAT TATAFCOREAAC DSSEACT HTS (Se2AAL3) BED 3304 F727 E198 F83 SCC 975 PC 9719000 444, 3 SCC 975 PC 971900 1444, 3 SCC 975 PC 971900 1444, 3 SCC 9719 PC 9719 PC 971900 1444, 3 SCC 9719 PC 97		
	nd-ba-sgat nikiboliy dirres nikiboliy dirres dir dirres dirres dirres dirres di	REPP COVINS (M4033 INSSV0700 ITUMO38 ITUM038 ITUM038 ISU (M4Partmant Associate COVINS IA108 IA10		confi perm pactword separate search search search search search confi perm confi perm confi perm confi perm confi perm confi perm confi perm confi perm confi search searc	0CTBRETEDEVICESCHART CARANATERISEAND CERTACEPTISERAZIAN BECOMMENTATIONNAME EXCENTIONNAME CONTROLOGICAL DESCRIPTIONNAME CONTROLOGICAL		
	nd-ra-sgat mindebag diarana mindebag akag akag diarana diarana diarana mindebag mindebag diarana mindebag diarana sikinda akag diarana sikinda akag diarana sikinda akag diarana sikinda akag diarana sikinda akag diarana sikinda akag diarana sikinda akag diarana sikinda s	BEEP COMMS COMMS Gel (3) MISS-WEIN THE SALE TO A S	: tie	confi pres paravord hextR1 bia MMM Parameter MMM Parameter heat paravord paravord paravord mextR1 paravord mextR1 paravord	DICTIONED CONTROL SALES CARGA TO THE TOPOLOGIA CELECTIC PERSON CONTROL SALES SECTOR STRUCTURE SALES SECTOR STRUCTURE SALES SECTOR STRUCTURE SALES SECTOR STRUCTURE SALES SECTOR STRUCTURE SALES SECTOR SALES SECTOR SALES SECTOR STRUCTURE SALES SECTOR SALE	HET OF LOCAL BURGET ACOUNT BURGET ACOUNT BUR	
	nud-su-sugat mikitobity dirimany nikitobity dirimany kitobitid disali disalitta disalitta disa	ACCP COMPAG MACSACING MACSACING MACSACING ACCA ACCA MACSACING ACCA ACCA ACCA ACCA ACCA ACCA ACCA AC		confi post pasavood theyettit kant supari pasavoot adip confi pasavoot adip confi pasavoot adip confi pasavoot dip confi	DCTRRETORYDAECHOL CERACATTER (SGARAU) CERACATTER (SGARAU) CERACATT	HELD JOIN MELD JOIN 2005 2005 2005 100 MELD 100 MELD 1000	
	nd-habdyd akabdyd diwres akabdyd alwy ymrae ymrae akabdyd Abar	BCTP CONVIS CONVIS CONVIS VACS-VIDIO TTLHPOSE VIDIO VIDIO VIDIO VIDIO VADARENSEE VIDIO	: tie	ordi pro- pro- pro- base M.M.M.Passeed *restop* halt spail orjo cordi pro- pro	DCTRRETORYDAILCANCE CEREACUT PERSONAUL CEREACUT PER		
	nd-ra-sgat mkrichtig diarma mkrichtig diarma mkrichtig darug diarma kabertich Saab diarma mkrichtig diarma mkrichtig diarma diarma diarma diarma diarma diarma diarma diarma diarma	ACTP COVIS GPUCS GPUCS THERCOS STURE STURE STURE STURE STURE ACTP STURE	: tie	ondi pro- plazivod slazivod slazivod slazivod slazivod slazivod slazivod porivod slazivod sla	0 CTRB1 D00/2018 244/2 (CH4AA 211 F05/64/44) (STAC41 F15/62/24/4) B0 3304 F17 B18 B18 B0 3304 F17 B18 B18 B18 H444 000000000000000000000000 D18 H440 F17 B18 B18 H440 F1 100 5004 F17 B18 H440 F1 D18 H440 F1 H440 F18 H440 F1 D18 H440 F1 H440 F18 H440 F1 D18 H440 F1 H440 F18 H440 F1 D18 H440 F18 H440 F	HELD JOIN MELD JOIN 2005 2005 2005 100 MELD 100 MELD 1000	
	nd-habdyd akabdyd diwres akabdyd alwy ymrae ymrae akabdyd Abar	BCTP CONVIS CONVIS CONVIS VACS-VIDIO TTLHPOSE VIDIO VIDIO VIDIO VIDIO VADARENSEE VIDIO	: tie	ordi pro- passood spectrati isad M.M.M.Passeed isad spasi olg- cordi posi passood most201 isad isad isad isad isad isad posi passood most201 isad	DCTRRETORYDAILCANCE CEREALTH (FROMAN) CEREALTH (HERE LEAS	
	nd-na-sign nikologing diarenes nikologi alang kanan kanan kanan kahalidah kanan kahalidah kanan kahalidah kanan kahalidah kanan kan k	BETP BETP CONING GROOM MASS-WITH TTUPICON VIVICE VIVICE VIVICE VIVICE VIVICE VIVICE MASS-WITH MASS-WITH WITH MASS-WITH WITH MASS-WITH WITH MASS-WITH WITH MASS-WIT	: tie	ordi jere hearvood haavood haavood haavood haad parvood sopat parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore parvood solo cordi pore pore parvood solo cordi cord	DCTRRETORYDAECAAC CARAACTIN (1965AAA) CERCACTIN (1962AA) BOD DAW (1965AAA) CERCACTIN (1962AA) BOD DAW (1967AA) BOD DAW (1967A	sector social sector social sector social sector sector sector bearing bearin	
	nd-ra-sgat nikologing diarang nikologi akng diarang diarang diarang diarang diarang diarang nikologing diarang	BCTP CONVIS GHO (M) SHO (M) MASS-wTMD STLMEDOR VICLA VICLA <	: tie	ordi jore partood sheat201 kad MM M Paramet And Parame	DCTRRETORYDAICSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU CERACATTYRCSACU	sector social sector social sector social sector sector sector bearing bearin	
	nd-na-sign nikologing diarenes nikologi alang kanan kanan kanan kahalidah kanan kahalidah kanan kahalidah kanan kahalidah kanan kan k	BETP BETP CORVIS GROINS MASI-WITE TTUPICOS VIVIC VIVIC V	100 · · · · · · · · · · · · · · · · · ·	ordi port paparod hextRI bak MM Present hat partod port ordi port port ordi port partod partod port partod partod port partod partod port partod partod port partod partod port partod p	DCTRRETORYDAECAAC CARAACTIN (1965AAA) CERCACTIN (1962AA) BOD DAW (1965AAA) CERCACTIN (1962AA) BOD DAW (1967AA) BOD DAW (1967A	rends 1004 .ends 2001 .ends 2001 .ends 2001 .ends .en	
	nd-na-sgat nakabaha mkabaha diarang akabaha akabaha kabaha diarang kabaha diakabaha diarang nakabaha diarang nakabaha diarang	BCTP BCTP GROUS Second Secon	: :: :	ordi port paparod hextRI bak MM Present hat partod dip portod port dip portod partod dip portod dip dip dip dip dip dip dip dip dip di	DCTRRETORYDAILCANCE CARGAN THY FOR ADAL CELECONCEPTION CONCERNMENT CELECONCEPTION CONCERNMENT CELECONCEPTION CELECONCEPTION CONCERNMENT CELECONCEPTION CONCERNMENT CELECONCEPTION CE	sector social sector social sector social sector sector sector bearing bearin	
	nd-ra-sgat ndividelity diverses ndividely diverses ndivide darg diverses diverses diverses diverses ndivide sgat ndibiolog diverses ndivide sgat ndibiolog diverses mail/secoget diverses divers	ACTP CONVIS 04008 14008 11008 11008 1007 1007 1007 1007 1007	100 · · · · · · · · · · · · · · · · · ·	ordi gine paraod paraod paraod bab dist dist appri- dist appri- disp pre- ordi paraod adp pre- ordi paraod adp pre- ordi ink making disp cordi ink making disp disp disp disp disp disp disp disp	DCTRRET D0072082 SAUCE (CRANA STIT FOR SAUL TSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 BTSTACKT PTP/SO2A40 STACKT PT	rends 1004 .ends 2001 .ends 2001 .ends 2001 .ends .en	
	nd-na-sgat nikologing diarang	BCTP BCTP CORVIS 64008 MASS-wEND 511,44008 VICIS 11,047038 VICIS 11,047038 VICIS 11,047038 VICIS 11,047038 VICIS 11,047038 VICIS 11,047038 VICIS 20,0740 VICIS 20,074000 VICIS 20,074000	: :: :	ordi gine paraod paraod paraod bab Mith Research algo approved algo cordi portood algo cordi portood algo cordi paraood algo cordi paraood algo cordi makkap constant bab bab bab bab bab bab bab bab bab ba	DCTRRET D00/2018 244/2 (CHRA 211 FOR SAAAA) ESEACT HT SHO 224/3 SHO 2004 FT SHO 224/3 SHO 2004 FT SHO 224/3 SHO 2004 FT SHO 2014 SHO 2004 FT SHO 2014 SHO 2014 FT SHO 201	rends 1004 .ends 2001 .ends 2001 .ends 2001 .ends .en	
	nd-na-sign nikologing diarena nikologing diarena sikologing diarena diarena diarena nikologing nikologing diarena diar	BCTP BCTP GROUS Second Secon	: :: :	ordi gen papers papers back MM Present back MM Present back parened wip cordi pore parened wip cordi pore parened wip cordi pore parened wip cordi pore parened wip cordi pore parened wip back data parened parened wip back data parened p	DCTRRETORYDAILAND	rends 1004 .ends 2001 .ends 2001 .ends 2001 .ends .en	

- "File Save As" will prompt to pause the session.

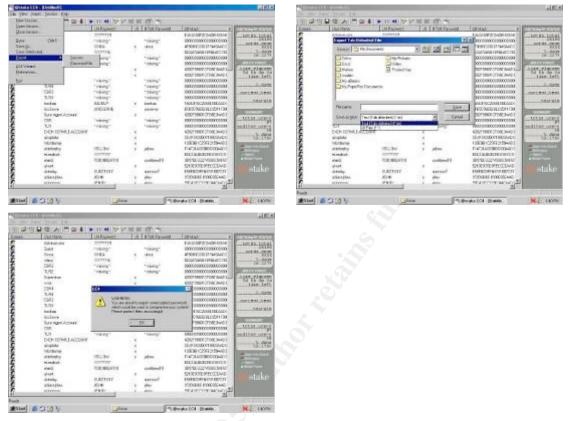
Mar Last David				a.(21)-6	The lot of					
DABBS Y		他的情情				BO A FOR	- IR 44 [37 ST	10 10 17 14		
ANTINA CANTERNA	LM Franker	THE STISPERSON	241450	CONTRACTOR OF STREET,	Crone's	Garritica	MPLART.	THE STISPEDORE	241400	ALC: NO. OF THE OWNER.
205 desired	a however	the state of the s	FIGURE NUMBER OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWN	101.01.101.01.01	F	2.5 + shoks	TOWNERS OF	Contraction of the second second	PROMOTION SAME AND A	
Take .	118.001	*rising*	00000000000000000		2	Date	Training"	"rising"	000000000000000000	
illeves.	100 WA	1 1805	ATTRACTOR OF TANSAULT	- not the correct	2	Hints.	IIII WA	1 1805	amountoes preasured	
riker	DOCATE .	0.000	REASONING / PRIMACT TR		č	miner	DOCTOR.	0 9.5	REAL PROPERTY AND ADDRESS OF THE	
2992	"reing"	* Depictor*	100000000000000000000	18.4105	2	2942	Training"	* memory*	1000001000000000000000	
1.42	Tribalig"	* minutes*	1000000000000000000000	GRACE CONTRACTOR	2	1.42	"reader"	* mitraine/*	10000000000000000000000	COAL COURSE
Sawter.			CROTHING TOW Just 1	hase planet	2	Saw down			CROPTING TOWNS AND L	
		12	\$2071000.75% 3H01		2			12	6007100012756L3H01	-187.67%
12584	STATISTICS.	C. Barrison	promotion	sam Left	2	1384	100000000	And and a second second	10101011100100100	1,000-3
3.64	164	and a second sec	and a second second	3.0076	2	1.84	THE OWNER	Contraction of the local division of the loc	HILLING CONTRACTOR	
1342	11/11/2010			The second second second	*	342	118415 A		100000000000000000	100000000000000000000000000000000000000
2.00	(P) Yes said to p	sector coll a access training	in the action procession		2	3.00	Teams 1	Autor store paced	Inneanneannean	
in the second se	the stee week in	dates weath	NIR INCASE.	Anarate .	2	index.	MARY (1)	and the second second	NOLF INCOME THE ART	Area -
biliner.		1.1	040220700		2	biling.	NEELP		FEEDWIRE 121720	10000000
Sare Agen		20	17083w01	and the second se	34	Sale Ageni Account	manar.	100 BA 110	05079801070623w01	STATE OF A
100			17192,0401	LOLDIDIMOS	2	CORE AGON ACCOUNTS	1000		NUCLEAR CONTRACTOR	total of
100		1440			2	10	1000	1840	10072000020000000	the state of the second s
	reader.	, nexo.	1000701000001000000000	2501102_02#13	19 H		reader.	, news.		3601192.50
	NUSACON		4007198010704634403	10.1156	8	DEMONICATION			400/1801/2016 3440 E	
winghte		1.14	DEPENDENT MONDEL	18.1159	-	witelike		1.1.4	0.000001000000	10.1863
Hiderie	2015		100081022672558401	The subscription of the	8	reliaburite.	Section		10008102072559401	a straight
sianety.	10.194	4 Marca	FLACE AND		6	ularitati p	10.194	4 March	FLAT MARTINE REPORT	a contraction
wireshold.	Those the		BELEASTREPORT	a Bridg Turbe	6	wireship .	2004409		BUSSEDUCT	a Brite Lane
meta .	FOE IBENING	a sufficient #	BREDOUZ-MORCHED	I PERCHARGE CO	6	mark	FOE IBDUING	a number of the	BSRCC2MBENFU	In the second second
i ginek			SAXINEATECTIVE	stake	6	wheek.			SACENERATION	stak
shireley-	0.0025317	access?	100F0CD49 64/4 807(31	minutes:	15	stanley.	U.KCENTF	access?	ENERGISE BOYS BOYSE	Stat
a for spins	10.4	1 (0)	1720/00/05 #1000/050/w40		<u>c</u>	uforsplas.	10.4	1 (0)	STOCIDAE BIORISSEMAD	
10 torio m	1841	1 811	PERSONAL PROPERTY AND INC.		1	al trates	1841	1 8111	ALTERNATION TO A	
#101EP#08A40	1.55 distant Life and an and the	1.		and the second second	with particle					The Party of
1 50 0 V	Gla		Render 1/04 - Illineter	N & 100m	1813au 2	O D V	Gin		terator 1/04 - Illianteix	N.E. 10

This will save the session as it exists (to allow a restart).



_

- "File Export Session" will present the same prompts to pause the session, and allow the results of the session to be saved in a txt file for analysis:



 "File Export Password File" will present the same prompts to pause the session, and allow the results of the session to be saved as a dictionary file for later use in sources for password cracking:

Marines.	(MEN/WEAT	118	ATTRACTOR STORE	REALS A	Contraction of
Experi Parrent File			T	x Date management of a	-101.8
Senate Contractor	e0	R. CI		TXNICOBOTIMSHOT	
Filter	Congrittane		a state store in a state	Concentration and Concentration	
- Raof	1580			000000000000000000000000000000000000000	10000
Mahsie				\$1271889:70#3441L	-185
C. I roden				021007.010K.3H0.1	2243
My alteria				arcenarceanceano	1110
Wy/TopicTex Discover	100			horesone sone son	inter
				horesameenmeen	1411110
10000				and scatterings	1
PH DATE:			140	R03868822020	lane-
Shearport Dataset	Tites (1996)	-	· Land	52380-7583w01	
U	"/#I/4"		"Party"		mille
DEMONSTRATION	115-127	. 4	121-53	499798977983402	1.1.1
		1.14		Discontrationer:	1111
water				10030-02072-59e/01	1000
trikindenter	Sec.				
minimume attendep	10.194	. 2	direc.	n arrelanning means	4.7
militarine unanostrp militarinat	10.54	÷	1100	BELORDER STOLEN	100
rikinise si kristip riveskut starit	10.194	1	ative conformed (f	BELGARDERORTER - BETROLEMBERRO	-
rstrikerne stantodro standat stant gisat	TOD INCOMES		cultived #	BELGARDINGHTCH BERGGZ/MBCSHO SNECEPHECEMB	121
rikinise si kristip riveskut starit	10.54	1	1100	BELGARDERORTER - BETROLEMBERRO	

Bre Edit View Insert Formal Iools Data Window Eslo Adder		1.00		2.1									0.11 (2.205	1081.506	100.3
343333270X44-7	100%	(Anal		- 1		1.11		-11 8		2.18	18				
12월 대 영국에 전 관계에 전망하는 eth Owner, Publisher, 1921년 1월 1931년 1월 19															
A 8 C	0 E	. 5	.0		1	1	К;	167	M.	- 11	3	3	1	0	R
Auditing Fine Security Review- Password Analysis															
Sectury review- Password Analysis	-					_	_		-			_	_	_	
frejore:	Open														? 🐹
See Damp Date: 01/20/02	Look ja	Ep module											×	- Tody	* any
Instructions	3	Name	Col.brt									Size Tw	t Doourn	art.	Date Mo 1/28/200
opert Pastword Crack Rosults	Ptr Record Decements	E GET-M	Passwork	HOPHEN	ŧ						11	NS TO	t Dorum	art :	3/28/20
Impart crack results from Opht	Ø	8.03/4	-Pwd2.td -Pwd.bit										t Dosum t Dosum		3/27/201
And the second	Centre	E User-											t Doolm		1/26/20
Open passward crack results, bit file using tab delimited redtod	25														
Copy short to this workbook for ease of use	Hy Docidents														
	120														
Out and partie all participant data into PasswardReeOats sheet under the paper columns.	My Computer														
Copy data from the UserState tail from the ACL Users Worksheet into the UserState tak		*													2
Copy fire Machine Accounts table in the sum tab from the ACL Users Worksheet into the	Phy Security	Pir ganci	Lingenter										-	-	12040 *
Copy the Machine Accounts table in the sam tab from the ACL Users Warksheet into the schere Accounts tab here.	Places	Hat of Stat	Alther (*.												Cancel
			Higher Higher	CWos Escalf Nos Escalf Nos Escalfilos as (* May * 2 Sen) Sens * July *	(*.s*) *.sk	*.shi *.shi	* chi * ck	(etc.*;	100 TON .	36.*385	*.ak; *.d	6.788C.18	101		
Adjust the table is the formula in the Disabled Acct calurus in the PasswordDetail tab	_	-	Dit Hes (*	unit "omi "Juli "	ini.								-		
Core, posto special values) from the calaxies in the Password Detail into the Password wOats tab	_		0.0145.0										1		
Son the PascovintRawData tab by machine account, deathed account, user ID															
On to the Passeer(Detail tab and note the last valid row of the data and the last row of the classified accounts		+													
Go to the Personnel Statistics tab and perform a Deta PeorTable. In the back listion and goat the source table to the appropriate row for accive accurate.															
D. Go to the Paraword/Statistics tab and perform a Carls PhotPatie as the second peoplete hit Pro block batters and opport the searce table to the appropriate reve for all accounts.															
1- Oo to the ParawordStatisticsPresent tab and adjust the presentation tables to reflect the are in the two tables in the ParawerdStatistics tab.															
3 Adjust Presentation take by Inding an and rows.															
N\Summary/ PasswordPresent / PasswordList / PasswordStatistical	Wesent / Pu	novoriEtat	ms /1	meltame	able []	e									
	and the second		n				_							1.1.1	
tart PSEF (4/3) Einengers PD	anana -	Stow	(Cinat)	90	NA-User							-	1060	10 es	66 8 8 9
Four Import Million of Chart 4 of C	1	2 🗙		-					-	-	- 0	- 6 9			0
Text Import Wizard - Step 1 of 3					ext l	mpe	ore v	viza	re -	ste	ρz	or s			
The Text Waterd has determined that your date is Delmited.				T	-	late and	set the	delimiter.	e your de	ta conta	ere. 11				
If this is correct, choose hexit, or choose the clate type that best describes yo	ur deta.			H	ows your t	eot is aff	ected n	the pre-	iew beid	M					
Original data type					-										
Choose the file type that best describes your date:	a:				17 Tab		terret	24. 8	Corr		Tre	d corners	utive dei	inform a	n - 111
Opennieg Characters such as commas or tabs separate each field freed with Fields are aligned in columns with spaces between each fields are aligned in columns with spaces between each field freed with tables are aligned in columns with spaces between each field freed with tables are aligned in columns with spaces between each field freed with tables are aligned in columns with spaces between each field for the field freed with tables are aligned in columns with spaces between each field for the f					E teo		Other		CI Can	142	Te	t g_alite	. •	-	~
		-			C Stee	- L	Sugar	-0				- Mr. an a	100		
Stort index: at your I 🗘 File an air: 437 : OEH U	hited States	¥													
Preview of the DiviSiNA/WorkAres/33/N4-Password-LOPht t-t				D	sta grevie	14									
				2						00000					
1 PORAIDUDERIMANDIANDAN JASSWODDILESS THAN SIGHTORI 2 Distant structorOPASSIDIDDDpassworODESA2A007282809E8 3 Diverti wissing SDP sissing SDD0000000000000000000	LAGOARCERS	58		0		DEEDKAR Marini Roman		1444	AN DAS MORD		1188	THAN B		TIM Di asswor wigst	
2 DRAWERS at asting "DDs at asting "DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	17776189923	152				Fines.		FIRE		S	Ļ		C.	inca	nd .
4 TVincaEVINCADADyincaD4798699669067445AAD3D4355146 5 DalacyDF3CAN7100Epecanpi435DAD7AD0470963A017006277						Fines.			A 1712		Ē			inca ecamp:	
		100			(-	-						2

- Import the password file into an Excel spreadsheet.

Cancel Character

Next D Brish

Canad CBack Bests Bran

his screen lets vou select eac he Data Format	h column and set	Column data formati ③ general	
General converts numeric w values to dates, and all remain		O Just O gate: H/r	Y
		O Do not (mport o	olumn (skip)
Advanced			
lata gravlaw			
Seneral Surveys		LEASE THAN BILBE	
<u>Egyanted</u> Nota gretien Semeral <u>Departed</u> Departed Marini strator Trans	LAREAN DASSIDED		

41	 E DOMARY 																				
A	3 C 0			- (ð				K	L.	M	N	0	- H	0	R	B	T	U.	V	W	X
6143								00-013													
	Administra PASSA/CR0			A00F47433A01	HIBACDFB	(0d th 56n	Hybrid														
	Guest * reliasing *	* relasing																			
	Visca VINCA a	VIICS		890661888270																	
	which PECANFIE	pec a spiel	:5048	7 ABIOESCEPO	P3F24A4A8	(2d 2h 40n	Orate Ford	ik													
	CSR2 * reasing *	* reistring		-0.0																	
	7UR2 "relaxing"	* ni ssing	1	い際になった	100000																
	Superviser PEFIP in	Nfp	4280	F986(C199134)	CODEFEBS	03.25716	Brilla Ford	¥													
	yeak REFF a	ntp		F9080 C 1031340	C3D877 \$3	0d 2h 7m	(Dags Fort	8													
	CSR4 *relating*	* relating	-	0 0																	
	TLR4 * missing *	* ressing	5																		
	CSRI *ressing*	* ne sising		. 9																	
	" greaten " ERuf	* reasing		2 R. C. C. A	0.2.2.	\$522.22															
	Backap BACKUP x	backep		416C/R360F863																	
	AccSens ARCSERVE			578673DAABP																	
	Byez Agin REFP a	ntp		F9660 C1831340	CROBANES	0d 2h 7m	Chate Ford	*													
	CSR *reasing*	* reissing		9.9																	
	"tult "reissing"	* reasing																			
	EXCH-BEFREFIP 1	stip		F9866(01831340																	
	aboptiste 120665 s			0003 88 (33) 64																	
	extended LEVEY is	1445		981C3338648C																	
	atimberies YELLOW a	i egon		31A0141200E61								_									
	ekendick 27772777			TAILST'TUCSS								-									
	elent POOHEE4810	pochbear		ED2244F05780				_													
	akoet a			E035LA7E9F07																	
	skinsky SUCCESS/			SZOF BAUDHE																	
	adotepte: JOHN a	1290		685E696F9489																	
	stington .EWY a	jeany.		IOFC OFFECS?						-	-										
	ekelis PAPER s ekericat ALATNA s	paper		3985 ACFDA79																	
		ante		0 C295E993141 POES 0787E75/				4													
	Fedina FECCINE a	fedi so								-											
	skelper BUSCH e	butch		PF67-46817APC A87A035E090																	
	Advanced BWEETPEA Advanced BNDMMOBLE			074576CE105						-		-									
	ators DIANE a	dare.		9499-83024F0																	
	mant GRACIT a	2112		116200070080																	
	Recep RECEP a	NCED		CBES 50437787								-									
	approx HSBSARISD			6660 6689E52				<u> </u>													
	reasing HUNTING a	hurding		17709734004					-		-	-									
	apprent REPLOS a	sples.		0303700F4E																	
	aking FRUT a	fut		SECES30285FS																	
	skarcher PASSWORD			ALERSHOP 7E/																	
	mingston HAJILET a	hurley-		0443/5EEE540							-	-									
	Inkerigste BABTHUL			SINAR COERCIGE																	
	wiereboom ZANEA (a	20.000		2545 250716-0																	
	mission CLOCKS is	clocks		4061/5140761D																	
	auter AUDITORI	auter)		RECF DEFENCE																	
	Bank HSB in	hab		ESCELABOR 258																	
	mdisidorus PSALM333			97102106912447																	
	VOE ADO/VERITAS a			1103/79661393																	
	#4 study HOLEAYS	holiders		4049.4F5F4808																	
	rearies WATER a	winter		AACE C7F89498																	
	sker s			INCE BOOPSAD																	
	emasmus TRUSTY a	treats.		6B1CAC3EF00																	
	niek GR.Y a	gity		FIJF BAERIOT																	
	planet BUDDY a	bally		AT AS P BOOKEN																	
	citizant ArtiED	, and the		IV CINEADERT																	

The results can be analyzed using several techniques. A summary of the number of passwords cracked by each method is an impressive presentation for management. It really shows the results in a meaningful way. In order to do this, each account's time to crack should be categorized in groups similar to the following:

- a- Under 1 minute
- b- Under 1 hour
- c- Under 4 hours
- d- Under 8 hours
- e- Under 24 hours
- f- 1-2 days
- g- 2-3 days

h- 3-4 days i- 4-5 days j- 5-6 days k- 6-7 days I- over 7 days

Combine this with the L0pht categories of cracking:

An	Brute Ford Dictionary Hybrid User Info Not Crack ad a table o	ed	gful resu	lts can l	oe preser	nted:		
	A	В	C	D	E	F	G	Н
1	Auditing Firm						01/28/05	
2	,	å	Δ	nyBank	1			
	-	Bee			Ctatistics		-	
3		Pas	sswora C	racking	Statistics			
4								
5	All User Accou	nts						
6				Crack	Method			
7	TimeFrame	Brute Force	Dictionary	Hybrid	User Info	N/A	Grand Total	
8	N/A							
9	a- Under 1 minute							
	b- Under 1 hour							
	c- Under 4 hours							
	d- Under 8 hours							
	e- Under 24 hours	-			-			
	f- 1-2 days							
	g-2-3 days		1			_		
	h-3-4 days		1					
	i-4-5 days							
	j-5-6 days							
	k-6-7 days							
	I- over 7 days							
21	Grand Total						-	
28 29								
125								

	A1						-
-	A	В	C	D	ſ	J	M
1	Aud	ting Firm					
2			Any	Bank			
3			Passw	ord List			
5	Seq	Username	Lanman Password	Less Than Eight	Method	Cat	
6	1	Administrator	PASSWORD		Hybrid	b- Under 1 hour	
7	2	mlacy	PECANPIE		Brute Force	e- Under 24 hours	
8	3	ArcServe	ARCSERVE		User Info	a- Under 1 minute	
9	4	akiel	LEE12134		Brute Force	g-2-3 days	
10	5	backup	BACKUP	x	User Info	a- Under 1 minute	
11		backup svc	REFIP	X	Brute Force	b- Under 1 hour	
12		ekay	DAISY	X	Dictionary	a- Under 1 minute	
13		eerasmus	TRUSTY	X	Dictionary	a- Under 1 minute	
14		ekipp	PS14310	x	Brute Force	g- 2-3 days	
15		ekinghorn	JENNY	X	Dictionary	a-Under 1 minute	1
16		mkingston	HARLEY	X	Dictionary	a- Under 1 minute	
17		mkingston	CONR6	X	Brute Force	b- Under 1 hour	-
18		adiana	MUFFIN	X	Dictionary	a- Under 1 minute	-
10		ekercher	PASSWORD	Å	Dictionary	a- Under 1 minute	-
20		ekennard			Dictionary	a- Under 1 minute	-
20		CSR	BLIZZARD				-
			* missing *	-	N/A	N/A	_
22		CSR2	* missing *		N/A	N/A	-
23		CSR3	* missing *		N/A	N/A	-
24		CSR4	* missing *	_	N/A	N/A	-
25		CSR5	* missing *		N/A	N/A	_
26		mdiodorus	PSALM333		Hybrid	b- Under 1 hour	
27		dkeese	CORABA	x	Brute Force	b- Under 1 hour	_
28		ekeen	DIANE	X	Dictionary	a- Under 1 minute	
29		mkiernan	WINTER	х	Dictionary	a- Under 1 minute	
30		akerr	OUTBACK	x	Brute Force	f- 1-2 days	
31		akent	DSKDSK4	x	Brute Force	g-2-3 days	
32	27	mkennicot	CLOCKS	x	Brute Force	b- Under 1 hour	
33	28	mkinsley	PASSWORD	-	Dictionary	a- Under 1 minute	
34	29	ddyonysius	SNOWMOBILE		Dictionary	a- Under 1 minute	
35		akinghorn	BOZOB	X	Brute Force	b- Under 1 hour	
36		mkelly	GIRLY	X	Brute Force	b- Under 1 hour	
37		emailad	TRUSTY	X	Dictionary	a- Under 1 minute	
38		emaildump	EMAILDUMP		User Info	a- Under 1 minute	
39		adiotrephes	JOHN	x	Dictionary	a- Under 1 minute	
40		exch-backup-agent	PASSWORD		Hybrid	b- Under 1 hour	
11		exch-nav-agent	REFIP	X	Brute Force	b- Under 1 hour	
12		EXCH-SERVICE-ACCOUNT		x	Brute Force	b- Under 1 hour	
13		aking	STUPID381		Hybrid	b- Under 1 hour	
4		Bank	HSB	x	User Info	a- Under 1 minute	
15		Bank1	HSB1	X	User Info	a- Under 1 minute	-
16		finloan	HSBLOAN	X	User Info	a- Under 1 minute	-
+0 17		Internal	* missing *	X	N/A	N/A	-
18		alambourne			Brute Force	b- Under 1 hour	-
48 49			ZANEA	X			-
		mkirkaldy	HOLIDAYS	200	Dictionary	a- Under 1 minute	-
50		mkinsley	HUNTING	X	Dictionary	a- Under 1 minute	-
51		mkent	GRACIE	X	Brute Force	b- Under 1 hour	-
52		dkinnear	KIOSK	X	User Info	a- Under 1 minute	-
53		mkimberley	LIPPY	X	Brute Force	b- Under 1 hour	
54	49	abaptiste	120665	x	Brute Force	c- Under 4 hours	

The detailed user list can be presented as follows:

The table combined with the user list allows the auditor to review the actual password cracking times against the password policy to see if the organizations' security goals are being met. In addition, this review, combined with the user and group review above allows the auditor to review the highest risk group (usually Domain and Enterprise Admins) in more detail.

4: Audit

The results presented here are from an actual review of a financial institution's Active Directory Domain. All domain names, users, groups and other identifying characteristics have been changed (a considerable effort), but recommendations have been developed based on the results shown here.

4.1 <u>Review User Accounts and Groups</u>

The DUMPACL utility was used to create a user-col.txt and group-col.txt file from the Domain Controller following the steps outlined in 3.1. The detailed results are as follows:

A C D F C Control MULTING MULTI	AL 14	risected (cm) Ant- Someral Surgère (force); SerpAct - NE		-	-	-	-	1 11	-
Cartiary Second se	COLORIZ DI LI MAL CAN		6	0			0		-
Child Parkament State Market or a state of the state of	AND AND TO THE ARE	The sector for a former for a former							
Interfactor Adverse (and strend from the segmet of the segme	1								
State Advertiser State	THE DATE MADE IN THE	and the second se							
Organ Antersecurity construction of the service of the s	of stand plantage								
Drops Drops DropsMaterial option in the depined in taking Net Drops <b< td=""><td>Contra</td><td>An internet World</td><td>Manufactures and the advantation that is more inclusion of the</td><td></td><td></td><td></td><td></td><td></td><td></td></b<>	Contra	An internet World	Manufactures and the advantation that is more inclusion of the						
Drops Dist Action (Mode Dist process increases of the dense) Action (Contreases) Original Description Action (Mater (Mat									
Dopp ComparisonMaintain and Main and	Director		The second of the state of the decision						
Conge Despine Again Makes (Mark Despine again method (The straight) Origin Straight Again (Mark (Ma			All controls and the second of the district of						
Coope Description Merians the group one work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Coope Streme former [The form Propose or work you pairs for the same) Hondlaw Streme form Streme form Hondlaw <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Onese Oregan (1) is of the formation of the inferred in the infered in the inferred in the inferred in the infered in									
Graph SMORT Advance (insuit) I </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Pathion Pathion Concert Concert <t< td=""><td></td><td>Contrast Information Contrast</td><td>Carl Burnet standardier of the includes</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		Contrast Information Contrast	Carl Burnet standardier of the includes						
According Units Units Units Units Handbard Labit status for absolution age to single branches In 1999 In 1999 Handbard Labit status for absolution age to single branches In 1999 In 1999 Handbard Handbard In 1999 In 1999 In 1999 Days for the status for a status fo			1.						
Contrain Exists Ability for Additional fo									
Hundbrei Node Date Implementation of the Sector of the Secto									
Non-Circle Image: Second		interest and a second sec							
No.6 optimized optima optima optima <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Logic Corr Logic Corr <thlogic corr<="" th=""> Logic Corr Logic Co</thlogic>									
Workstank Image: state in the									
Pack distribute No. Status Status Status No. Status No. Status No. Status No. Status No. Status No. Status No. S		lagis ber							
Deck of the second seco									
Notifique National National National National Notification Notification Notification Notification Notification Notification Notifi									
Nucl.gare No No Nucl.gare Novel.gare Novel.									
Nucl. part for Verb. part of Verb.									
No. No. No. Strategits No. No.									
Visite State									
Action Prog New Non- Non- List Lagrants Action 2000 (0000) (0000		14							
Land agen from Table from the first state of the									
Land Land Land Land Land Land Land Land	AccrEssivesTerre								
Lighting Af Second Second Sec	Last approprie	2000.3084							
Sef 9:10 1 1 10000100 0000000000000000000000	LactLagonGielver	Autorit							
Since in the second of the	condition 1								
Nuclearies Yes Compare Compare <thcompare< th=""> <thcompare< th=""> <thco< td=""><td>Ref.</td><td>14 14 11 18(R/2)187 187 (R/2)2 3(S)216 (R/4)1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thco<></thcompare<></thcompare<>	Ref.	14 14 11 18(R/2)187 187 (R/2)2 3(S)216 (R/4)1							
Nuclearies Yes Compare Compare <thcompare< th=""> <thcompare< th=""> <thco< td=""><td>Par Diale</td><td>Tes</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thco<></thcompare<></thcompare<>	Par Diale	Tes							
National Section Sectin Sectin Sectin Section Section Section Section Section Section S		Mare .							
and Company Control Co	Ast all activities	1							
Comp Process parts Partners Ansame Ansame Ansame Ansame Softwarssoft for part excess is the propolet domain Ansame Ansame Softwarssoft for part excess is the propolet domain Ansame Ansame Softwarssoft for part excess is the propolet domain Ansame Ansame Softwarssoft for part excess is the propolet domain Ansame Ansame Softwarssoft for part excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft for excess is the propolet domain Ansame Ansame Softwarssoft foreexcess is the propolet domain Ansame </td <td>and .</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	and .								
Calibiant Calibiant	Grape	Come Custo (Catel)	All comein mandel						
Accuarity to Une consist to puer access to the semptember of the s			The second second						
Convert Suffer accord to page accord to page accord to the tempder/domain sendition Convert Convert <thconvert< th=""> <thconvert< th=""> Convert</thconvert<></thconvert<>		Ster.							
AmaDian									
Identifies International Inter		and the second of the second							
http://www.second //www.second									
Agedbagk Japobe Naturation Natura									
Nonatasi Non		long bai							
Next and Sharayati No									
NadLactifier National Sectors (National Sectors) National Sectors (National Sectors) National Sectors (National Sectors) National Sectors) National Sectors									
NedBeguitt Nei NedBegeitt XX VerdEnsen VerdEnsen Verdens	Next action Taxa	6000 (000)							
VerGapen Ko Kondigan Ceno Nove enconectado An enconectado An									
Next Experimentation Next Contractions Next Reconstruction Next Reconstruction Next									
erfluisso Ner erkoleefte An Solouefte Nee									
vers/selection // No- todisate/file // No-									
Activity The And									
LandLapprOne Nater									

and the second se	Legandus B	ć		 1 4			
A		6	0		G	H	-
LagenHows -							-
Dia	5-46-21-1008022107-902/007494-2020415-80-601						
HesDade	la l						
Recallers	Name						
Pastalback/sumher							
letter.							
0.048	Carraie Users (Oldital	All cloude correly					
Fulfiation							
Acceptings	1/bir						
Convert HoneDive	Hits Stabilitation Cost in Stream Account						
HoneOise							
HereaDir							
Pulle							
Logerdicept.							
Workshittows							
Post all-the phil	760						
Peschardist"irre	2018/0.00472						
Prodiato.int	768						
PondEspero	78						
Postaprolas	30/5459/2						
AccElizabled	Ter						
Acctlinated Acct.obcethal	24						
AccElerations	(All and All a						
Last, agen Time	New						
LastagenBever	Safesi						
Lagenfows	Al						
5M	5 1 5 21-1828022187 182 837404 2023419 80 632						
Fail Past Dale	S IS A REALING RECORD ALL IS BOUND						
ResCollaco	Contract of the second se		-				
	1994						
PerCollociticsber							
Veca Grogal		The second					
Groups	Advalution (Social	Monitors can fully attrained as the compatienthemail)					
Cropp Drogs	Conste Admini (Clobal	Dez pretec editeristation of the density					
	Ourse these Ohited	All contain years)					
Fulltate	VeceLogi						
Accordings	UNP						
Connet	Used by Veccite access server						
Historic							
HomaDir							
HonaDir Perla Loge Dicept							
Logardicept	repolat						
Workshipton							
ProEaBolherett	76						
ProductionTate	20102-00034						
PendPagulat	78						
PrincEligities	24						
Prodigration	70.00 C						
Archinested	20						
Achtoritet	Au						
Acction#Fare	5904						
Lash.agan@ne	New						
Levil.sportServer	national						
Ligaritions.	A						
54	5 1 5 21 - 1939/027187 - 922 9274/04 30259 157 85 1398						
ThesDiale.	An and a state of the second s						
Rescultatio	have						

	H COLOR	and the second					 and the second se	and the second se
Second	Uter	Futtoine	Actions	Frankland	PARAMETER	Constant of the local division of the local	Last-open Trive	RetEate
Married Street	214	Factoria	- And a state of	a Personality and	C PARALAN AND DOM: 1	LagosHours	Even major total	Partacient
	PERSONAL CONTRACT							
	Adependent							
	Administration		-					
	Administrator							
	AMINGMU		101					
	Additional							
	Adminishator		- C					
	Administrator							
	Administrator		- C					
	Administration		- C					
	Administration	Astronationer						
	Administrator	Approximation	- T.					
	Administration	Approximated						
	Abuilde	Administration						
	Administrator	Administers						
	Administrator	Administrator	1					
-	Administration	Appendiation	1					
	Administration	Appretato	2					
	Administrator	Approvalues						
	Amongo	Ameridados			7/26/12 10 45 /44			
	Administration	Aphonisters	-		TG423 10-45 AM			
	Administrator	Accessor			704033045440			
	Administrator	Aphresister	L	Merce	70100310-05744			
	Administrator	Admediates	0.6	Heor	TG485-10-45-441			
	Advestedar	Amendation	24	Herer	10483 t0 45 Apr			
	Administra	Annoidator	Na	Meny	7.0a13 (0.a5 Ab)			
	Administration	Aprovience	(he	Henry	70403 (0.45 AH)		1 (30(0C-8+7 AM	
	Administrator	Administrator	Der	- Mercer	T01031045444		1/33/06 ± 17 AM	
	Administrator	Administrative	the later	Herer	X0003 1045 April	81	10006-812-88	
	Administrator	Administration	-De	Heor	10483 (045 /41 A	41	1/05/02 8-17 AM	C
	Adventised of	Approximation	Na	Here	Trians in as rena	ALC: NOT	123929 8 17 AM	Ven
	Approximate	Approximation	Da.	Marine	TOUGH IN STATIS	10 C	10206 817 AM	Vat
-	Administration	Approximation	742	- Herer	INCOME IN A REAL		10000 917 AM	Ver
	State .	Agricultury.	(Nr	Herer	7 CHES YO 45 44 F.4		1/2/28 ± 17 ##	
	Tracil.	Advantation	No	Heise	1010310310-0574074		10306 817 AM	
	Geet		Ne	Heor	10405 (045 APEA		10502 3 17 44	
	(Tarti)		Ne	Here	70403 8145,465,4		10505 \$17 AM	
	Guess		Na	blene .	7(1)(2) (C 45 A) (A		10206 817 AM	
	Guer		Siz.	Marin	7040210-65-441-4		10000 ± 17 AM	
			Ne	Marter	1010310-05-0414		10306 8 17 44	
	Oser: Own		Na	Menor	30453 10 45 440		103906 8 17 AM	
	Gast		Ne	Mecor	7040310457467		L0502.3 17 AM	
			Na		TOURS 1045 MILE			
	Gerti		Na .	New			10509 817 80	
	GARE			Herar	30363 10 25 461 4		1000E 817 AM	
	Sien		Ne	Herer	3/100 9:50 AMEA		10005 817 AM	
	(Tee)		Die .	Herar	39/00/6/60 44/64		103906 E17.AM	
	Guist		-Da	Menir	37/019/63/4454		10906 R17 AM	
	(Galer)		(Net	Herer	3/20010100 (44) 4		(0501817 AM	
	(Core)	and the second second second second	No.	Herer	37/00/0/00 44454	41	10500 B 17 AM	
	Gate		2100	Mercer .	3700 9 50 Atri A	£	10000 917 AM	Tes
	Gent		Sec	Mena	3/10/9/10 /4/04	6	10005 \$ 17.45	1.00
	Ganal		Nu	Marrie	37/00 9 60 /4/14		How	Yes.
	Gatt:		Net	Mexico	3/7/00 9 60 /4/2		Mexan	Ten .
	Gaser		Net	Herior	3/7/00/0 50 (44/14		Hever	Yes

-	H N	0	1000	Here	-	1000	SIGD AREAS		Files in the	and a second second	
	Guere -		Dian	Here		2/108	0.00 AHEAD		Fideate	10	
_	Oveni		- Nes	Harar	_		NO AREAR		First.	14	
-	NH:		740	Manage	_		250,488,A3		Treves	74	1
	h-Mar		Den	Manar		3000	C 43 ARE AU		Treas	74	
	is M (r is M (r		Der .	Marine		3/108	9.90 Ab6 Ali		Titule Dept	No	
	le bigi		Dec.	Marter		3/100	9.93 ABEAS 9.93 ABEAS		Figure -		
	is Mar is Mar		Ner.	Marter			9.50 A64 A3		Figure	No.	
	lettg: -		- Dec	Here			14346.090		Trever	154	
	14.80 gr		N 44	Marine Marine		2/108	9 60 ABEAR 9 50 ABEAR		Fields	74 70	
	la de ga		2144	Manar		31/08	9.60.46.64		Plants	140	
	h0g		Charle -	Meter		1509.00	3 14 PhilAi		Newla	74	
	ivity: ivity:		5 er.	Herer		102202	5 14 Pb(A) 5 14 Pb(A)		Timet	. 190 Not	
	he bit gr		1.1.4.0	307.6	2318.616	112000	2 D-PREAD		Forum	74	
	kald gr		S.	- 224	3.3.14 PM	11/22/02	3 14 PH(A) 3 14 PH(A)		Firmt	70	
	iologi iologi		2144	2.2%	0314PM 9314PM		S 14 Pbi Al		Timer	NI NI	
	kitrg:		Cast.	52 K	13.4754		214 P9441		Ciever.	74	
	le Migr le Migr		Can Tau	224	2 3 18 PM		214 PREAT		Times .	74	
	in the		Pier.	3254	3 Y-14 Chil	152500	3-34-Pb4.43		News	74	
	left gi		210	125	1 8 LE (%) 5 2 LE (%)	150900	STAPPEAU STAPPEAU		Tablet	74	
	1 Marcin		210		CAMPH.		CHPMAX		TOPHY	N	
	Vince		- Der	2/2.4	0.214 PM	15/2302	214 PHEAR		Tiever .	14	
	Veca Veca		21	2274	0.314 PM	150308	2. SA PERAN 3. SA PERAN		Paren Notara	N	
	Vola		Pres	2014	111111	1:1/19/02	3.14.016.61		Titute	74	
	Vince	Nisea Legit	(Tex.)		9218PM		2 to Poll All		718441	no.	
	Veca Veca	Vince Logie Vince Logie	2 M	22.6	2214754		2 H PHAI 2 II PHAI		Timer	10	
	Veca	"Nona Luga	Nai.	2014	3318PM	150000	2 H PIEAR		Property	- NE	
	Virca Virca	When kept New kept	Pease .	2254	2314PM 7314PM	152302	2 14 Phil All		Stort .	70	
	Viria	Vehica Logie	- Pres.	- 32%	9.218 PM	11/20.02	2 SL PDEAL		TVPVPI	74	
	Unra	Winde Login	244	22%	2216796		2.11 PECA		Travet	740	
	Vinca Vinca	When Login Whom Login	No.	304	0318PM	1200491	S TEPREAL 1 E3 PDEAL		Traver	/40 700	
	Vieta	Minela Login	-2111	2254	0.3-14 PM	1200851	1.53PH(A)		Times	194	
	Vites	Mera Lege Mera Lege	Piere Date	327.6	1314794	1200/951	LENPERI LENPERI		Timer Timer	70	
-	Viela Viela	Vince Login	54	Hear		1200601	COPIEAL		Tiever	740	
	Verpa	Nives Login	2 in	Maror			1 63PN(A)		News.	No -	
	Veca Viros	Versa Logie Versa Logie	P.u Da	Hero		1200881	1 S3 Phi A3 1 S3 Phi A3		Place.	14	
	Vere	follows Lope	Ne	Herer		12/30/89 1	1.53P%4.44		Treat	1.74	
	Vieta	Norma Login	54	Harin			ESPIEAL		Pieves .	74	
	Vinca Vinca	Vinca Lope Vinca Lope	No	Marce		1000000000	1.53PREAT		Pariet Tener	100	
	Maria	Minus Loov	- K.	1.		10.000	100 00 000		Tobate	740	
	DR 244 Drivit Fo	A-User Review-2005-ACL real Inde Data Wedge Leb / 4 a 20 7 0 1 2 2 1 1 1	Adobe FCF		4		123707A		1 16 25 1 7 (1 7 10 10 10		whee f
	Diff 3.ew Drewt Pp	A-User Review-2005-ACL real Inde Data Wedge Leb / 4 a 20 7 0 1 2 2 1 1 1	Adobe FCF					1:2220.4%	1994 1994 - 2010 - 2014	A Real Property lies and the second se	whie 1
8	Bit 2 ew (ree't 52 el 3 - 1 4 2 7 41 - 3 Feccel - 3 Feccel	Anni Intel IA-User Review-2005-ACL rhal Intel Data Witcher Leep - 4 on St. J. C. C. B. T. H. H. M. T. T. T. T. T. T. T. Fallows	Aduba PCT	n n (40	Prodice	post line	n 10 m l n .c.		। असे व्हेक सन्दे २	a a a	ne Fada
8	Ell 2 en Dreet 42 d 3 1 4 2 7 42 1 3 3 4 2 7 42 1 3 3 4 2 7 42 1 3 3 4 2 7 42 1 3 4 2 7 42 1 4 2	Other Epic IA-User Review-2005-ACL- rrad Extra Structure (see) s (b) (b) s (b) (b) <td>Aduba PCT</td> <td><u></u></td> <td>Prodice Reality</td> <td>post line</td> <td>× 20 × × × ×</td> <td>LigateRent</td> <td>994 • 1842 - 1848 - 1940 5</td> <td>Last operf</td> <td>ria Fadhi Na</td>	Aduba PCT	<u></u>	Prodice Reality	post line	× 20 × × × ×	LigateRent	994 • 1842 - 1848 - 1940 5	Last operf	ria Fadhi Na
8	Bit 2 ew (ree't 52 el 3 - 1 4 2 7 41 - 3 Feccel - 3 Feccel	Other Lipit IA-User Review-2005-ACL- IA-User Review-2005-ACL- III-User Review-2005-ACL- IIII-User Review-2005-ACL- Review Review-2005-ACL- Review Review-1000- Review-1000- Review Review-1000- Review Review-1000- Review-1000- Review-100-	Aduba PCT	n n (40	Prodice Nation National National	past line 1	n 10 n n c	LigerHam	9999 • 16 4 47 97 (2 + 4) ©	Last operation	na Fasto Na
8	Di yew Dref Sy H 3 1 4 2 7 41 M 3 1 4 2 7 41 M 4 M 1 1 1 1 1 7 41 M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Other Epige IA-User Review-2005-ACL- read read Extra Verdew-2005-ACL- (1) read Verdew-2005-ACL- (1) Verdew-2005-ACL- (1) Verdew-2005-ACL- (1) Verdw-2005-ACL- (1)	Aduba PCT	D AccElectors No No No No	Providing Notices Noti	past line p	10 1 1 1 2	CoperMann	9991 - 1921 - 1939 - 1930 - 19	istinger Stee Stee Stee With a	na Fadha Na Fadha Na Ma
8	ER 2ew Dreef F2 + 3 - 1 4 2 7 41 + 3 - 1 4 2 7	Al-User Review-2005-ACL- Inde Data Weden Leife / Action (1996) Action (1997)	Aduba PCT	D AccEleadors No	Prodice Predice Odcasor Rom Thicsor Sto	parts Terrer 1488 300000	n 10 n n n n Prostationfirm New 2100 4070 N New 2100 4070 N	Ligarellann	9999 1. 16 21 28 28 21 - 0 2	Latinger Latinger New State St	nin Fadhr Na Blit Tan Ma Blit Tan Ma Dis Tan Dis Dis
8	Dill gew Drivert For A S at 4 2 744 - X Record Date Same	Construction C	Aduba PCT	D Accelerations Test No. No. No. No. No. No. No. No. No.	Patalita Patalita Odeatar Save Network Save Save Save 20	past line 1	R 10 R R 4	Ligarðhani Ingi 2011 ar (s. 2011) við 2011 (s. 2011)	٥	Latinger Latinger Here XXXX A Here XXXX A Here XXXX A	ne Fadhr Na Kit Leo Ma Kit Leo Ma Alfo Ma Kit Ma
8	ER 2.ev Dreet =2 al 3 -1 3 -2 7 41 - 8 fecore Company	School Loop (A - User Review-2005-ACL (A - User Revie	Aduba PCT	2 (8) (74) AccElerators 744 745 745 745 745 745 745 745 745 745	Product Obleaser Sever Never Sever Sever Sever Sever	panta Seree 10 Milia 202223 and Alexans	P 10 P B C	Ligardilans ar (6-24)Tax(6-21)Web(6-24)Th	٥	La sila a La stanger time Status X Mener Status A Hener Status Status Status Status Status Status	ten Fadar Na Fadar Na Est Na Est Na Ha Est Na Ha
8	E3 2.ev (1997) * 4.3.3.3.4.5.7.6. * 8.6004 * 8.6004 ***********************************	Chief Epis IA-User Review-2005-ACL- real Ends Edit Wirdse Edit - Scarther State - Scart - Constraints of Killson - Scart - Scarther Scart - Scart - Macad State - Foodbay Connects Macad State - Scart	Aduba PCT	Accelerations Accelerations Test Test Test Test Test Test Test Tes	Patalita Patalita Odeatar Save Network Save Save Save 20	gana Taray Jana Taray Hili Jamato Anti Ascott 1971 Jakati	N 10 N B 4	Ligarddaun ar (6 201 ar 6 201 Wed) - 2011	٥	Lastingerf Lastingerf New Sciol & New Sciol & Sciol & New Sciol & Sciol & Sciol & Sciol & Sciol & Sciol & Sciol & Sciol & Sciol & Sciol & Sciol &	rine FreeDor Hile Block Teach Hile Block Teach Hile Hile Hile Hile Hile
8	E3 2.ev (1997) *	Advances IA-User Review-2005-ACL read Toole Data Workse Labo (A - V	Aduba PCT	Accelerations Accelerations Test Test Test Test Test Test Test Tes	Produces Produces Surver Stream Strea	para filma ana ancora ana ancora ano	* 10 * 8 *	Ligenelleum er (f. 2017 aufs 2014 kest): 20(1)	٥	Lastager Lastager Here Story Mere Story Here Mere Story Story Story	tine Facilia No Electron No Electron No Electron No Electron No Electron No Electron No Electron No Electron
8	ER 1ew Devri *2 + 1 + 1 + 2 * 7 + 1 + 1 + 1 + 2 * 7 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	School Logic IA-User Review-2005-ACL- real Inde Data Wedae Lee / IA-User Review-2005-ACL- IA-User Control (1990) IA-User Control (1990) Accession Control (1990) Access	Aduba PCT		Product Notice Notice Notice Street Scoret S	ana fina ana fina ana fina ana fina ana fina ana fina ana fina ana ana fina ana ana ana ana ana ana ana ana ana	* 20 * 8 * 4	cigarðinni ni fa 2017 aðfa 1974 affa 2017	٥	Landard Landagard Harri Science Sciences Harris Harris Harris Sciences Sciences Sciences	1 100 Fields No 100 Ten 100 Te
8	ER 1ew Devit *2	Advise Epis IA-User Review-2005-ACL- real Tools Entry Wedne Esto - ics A - 7 0 - B - 6 - 8 - 10 - 10 (a) 7 - 7 - 7 - 8 - 6 - 10 - 10 (b) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 - 10 (c) 7 - 7 - 7 - 8 - 6 - 10 (c) 7 - 7 - 7 - 7 - 8 - 6 - 10 (c) 7 - 7 - 7 - 7 - 8 - 6 - 10 (c) 7 - 7 - 7 - 7 - 8 - 6 - 10 (c) 7 - 7 - 7 - 7 - 8 - 10 (c) 7 - 7 - 7 - 7 - 8 - 10 (c) 7 - 7 - 7 - 7 - 7 - 8 - 10 (c) 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	Aduba PCT	Accelerations Acceler	Province Number Number Story Norse N	para filma ana ancora ana ancora ano	2 10 2 8 8 4 Production of the second secon	Ligardhan n (i. 2013e) 20(Wei) 20(1)	٥	And	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8	ER 1ew Devit *:	Subset Lipid IA-User Review-2005-ACL IA-User	Aduba PCT	P Automatics Automatics 744 Automatics 744 No 745 No 746	Provide Provide Notestar Neuron Neuro	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 30	zapadiane n (6-20) ang 20(Med)-20(1)	٥	And	1 1 16 Finglis No. 16 1
8	ER 2ex Devri *2 * 3 1 * 5 7 E * 8 Facet *	Advise Epig IA-User Review-2005-ACL- real Tools Extra Writes Exten- tion A-7 0 - B-6 - 1-11 (1) 7-100 - C-6 - 1-11 C-6 -	Aduba PCT		Provide Control of Con	481 3000 481 3000 301 3000 301 3000 301 3000 401 3000 401 3000 401 3000 401 3000 401 3000	1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ligarðfann mið 24(fæði 1974a), 24(f	٥	Last And Last Angel Here Series A Here 2000 Ja Here 2000 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja 2019 Ja	1 104 Findla No 107 Yes 108 Yes 104 He 105 He 1
8	ER 1.ex Devri 12 L 1 1 2 2 2 1 L 2 1 2 2 2 1 L 2 2 1	New Logi IA-User Review-2005-ACL read Toole Data Works Lebo - (a) A-7	Aduba PCT	Automatics Automa	Provide a series of the series	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1	Ligarðfann ar (ö. 24) f. að Stoff verði 24) f	٥	Latinger, Latinger, There 30003 at 16mm 2001 at 16mm 2001 at 2001 at 2	1 10 miles
8	ER 1.ex Devri *1	School Login IA-User Review-2005-ACL- real Ends Entry Works (14) (4) 7 (4)	Aduba PCT		Provide a construction of the construction of	ant low at any at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at any at at at at any at at at any at at at any at at any at at at any at at at at any at at any at at any at at at any at at at any at at any at at at any at at at any at at at any at at any at at any at at any at at any at at any at at at any at at at at an at at at at at at at at at at at at at at at at at at at	y y	Lagardinos er (6-24)Tantis 2004ea(6-24)Ta	٥	And	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8	ER 1.ex Devri *2 * 1 1 2 7. E * 1 1 7. E * 1 1 7. E * 1 7 7 7 7 7 7 7	Advise Lipit IA-User Review-2005-ACL- real 10x8 Entry Writes Listo - (a) A - J - A	Aduba PCT	2 (A) AccOntainer Feel AccOntainer AccOntainer	Provide a series of the series	ant low at any at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at any at at at at any at at at any at at at any at at any at at at any at at at at any at at any at at any at at at any at at at any at at any at at at any at at at any at at any at at at any at at any at at any at at any at at any at at at any at at at at an at at at at at at at at at at at at at at at at at at at	10 1	LigerHenn in G. M. Lands (1999a), 2017	٥	Last Last Last Last Here Scott A Here Scott A Here Here Scott A Scott	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8	ER 1.ex Devri *2	Subset Lipid IA-User Review-2005-ACL IA-User	Aduba PCT		Provide a Volkesser, Sorge Nokesser, Sorge Sor	ant low at any at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at at any at at any at at at at any at at at any at at at any at at any at at at any at at at at any at at any at at any at at at any at at at any at at any at at at any at at at any at at any at at at any at at any at at any at at any at at any at at at any at at at at an at at at at at at at at at at at at at at at at at at at	20 30 20 30 20	Lagardinan n (6-24)Tae(6-21)Wea(6-24)Th	٥	**************************************	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ER 1.ex Devri 12 A 1.e. 1 A 1.7 C 4 A 2.e. 1 A 1.0 C 4 A 2.e. 1	Unite Epig IA-User Review-2005:ACL- real Tools Entry Wedne Extro (a) A-7	Aduba PCT	Control (1997) C	P Providicy Volkoser Story Noret Boret Story Sto	1 part from 1 400 30000 201 20000 201 20000 201 20000 201 20000 201 20100 201 201000 201 201000 201 201000 201 201000000 201 20100000000000000	10 1	Ligarðfann	٥	**************************************	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ER 1.94 Dev1 12	Men Lipit IA-User Review-2005-ACL rel Tools Date Works Left 4. (A) (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) (A) (A) (A) Future (A)	Aduba PCT		Provide Otherson Start Sta	1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1	Ligarðfann ar (ö. 24) f. að Stoff verði 20(1)	٥	Latinger Latinger Here South A Here New South A Here New South A Here South A Here Here South A Here Here South A Here South A Here South A Here South A Here South A Here South A Here South A Here South A Here South A Here South A Here Here Here Here Here Here Here Her	
	ER 1.ew Devri *2	Network Department of the Constraint of the Cons	Aduba PCT	Comparison of the second	Tradics President Oderson Rosy Tolerson Sorr Sorr Sorr Sorr Sorr Sorr Sorr So	path/line 441 30001 30405 4 452 9000 30405 4 452 9000 454 3010 455 3000 455 300000 455 3000000 455 300000000000000000000000000000000000	10 1	Ligardhan ar fe 2017 a 6-2014 an fe 2017	٥	**************************************	
	ER 1.94 Dev1 12	Men Lipit IA-User Review-2005-ACL rel Tools Date Works Left 4. (A) (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) (A) Future (A) (A) (A) (A) (A) (A) (A) (A) (A) Future (A)	Aduba PCT	P Accordinations Test No	Tradics President Oblessor Rever Score Sco	440 30000 440 30000 341 50000 341 500000 341 500000 341 500000 341 500000 341 500000000 341 5000000000000000000000000000000000000	10 1	LigerHenn in G. X(Tarifi Olymodi X(T	٥	A A	
	ER 1.ew Devri *2 • 1 • 1 • 2 * 4 • 1 • 1 • 2 * 4 • 1 • 1 • 1 • 2 * 4 • 1 • 1 • 1 • 1 • 1 • 1 • 1 • 1 • 1 • 1	Subset Engl Ad-User Review-2005-ACL Ad-User R	Aduba PCT	Augustation Augustati	Products Products Newsy Newsy Newsy Server Server Server Server Server Server Server Server Server Server Server Server Server Server Server	Annual Control of Cont	20 2	LagerHoos n: (5-24) Tanifa 2014/4016-2017	٥	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
8	E8 1.244 Dev1 52 E8 1.2	Men Lipit IA-User Review-2005-ACL A-User Review-2005	Aduba PCT		Provide a second	Part New 1 441 1001 441 1001 101 0400 101 04000 100000000000000000000000000000000	10 1	Ligardians	٥	A A	
8	ER 1.ex Devri *2	School Login IA-User Review-2005-ACL A-User Review-2	Aduba PCT	K K	Proteiner Neuer Saver Sa	pat/2err 1 pat/2err 1 443 2023 2023/2014/2 2023/2 20	10 1	Ligarðfann	٥	2000 1 Latinger Hene 2000 1 2000 1	1 1 1 1
8	E8 2.00 Dev1 52 E8 2.00 Dev1 5	Man Lipia IA-User Review-2005-ACL- real Links Eats Weden Law / ACL - Control Links Eats / ACL - Control Links Eats / ACL - Control Links / Accession Control - ACL - I - Actions of Accession Control - ACL - ACL - Manuel Control - Factories / Accession Control - Control - Accession Control - Eats / Links / Accession Control - Control - Control - Eats / Links / Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Con	Aduba PCT	P Antrofiscience Yes No	Protocol Protocol Reprint Sector Sect	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	10 1	LigerHeen in ScotTaeScotWee(CotTo	٥	**************************************	I I 1 Particle
	ER 1.ex Devri *2	School Login IA-User Review-2005-ACL A-User Review-2	Aduba PCT		Protocol Protocol Reprint Repr	pat/2err 1 pat/2err 1 443 2023 2023/2014/2 2023/2 20	10 1	LigerHenr	٥	Latinger Latinger Here South A Here New South A Here New South A Here South A Here Here South A Here South A Here Here South A Here South A Here Here South A Here South A Here South A Here Here Here Here Here Here Here Her	I I me Respective Ma Ma Ma
8	ER 1.ew Drevt *2	Advise Lipis IA-User Review-2005-ACL: rend Dods Data Works Lake / Adviser Review-2005-ACL: Adviser Review-2005-ACL: A	Aduba PCT		Proting Visition Network State	1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 20 2 20 2	Lagardines ar (6-24)Tan(6-21)Wea(6-24)Ta	٥	Latager Latager les au	the standard sta
	ER 2.ex Devri *2 ER 2.ex Devri *2 E 2.	School Login IA-User Review-2005-ACL A-User Review-2005-ACL A-User Review-2005-ACL A-User Review-2005-ACL A-User Review-2005-ACL - AL - A	Aduba PCT	* * * * * * * * * * * * * * * * * * *	Proster Proster New Yorkson Same Same Same Same Same Same Same Same	1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	10 1	unger Allenn	٥	2 A 1 Latinger Hene 2003 A 100 A 2004 100 A 2004	the second
	Eli 1 2 en Direct 1 Eli 2 en Direct 1 Eli 2 e 1 Eli 2 e 1 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2 Eli 2	Maria Lipia IA-User Review-2005-ACL- real Ends Entra Weden Leb / Acuser Review-2005-Content (a) 7-2-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2-2-2-2- Second State (a) 7-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	Aduba PCT	the second	Proting Visition Network State	1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 3	LagerHines n:fi-24(TaeSpan)(MedSpan)(Ta	٥	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	the second
	Elli 1 244 Divert 1 2 Eli 1 244 Divert 1 Eli 2 244 Eli	Meta Lipit IA-User Review-2005-ACL IA-User Review-2005-ACL AL-User R	Aduba PCT		Parallia Volation Volation Report Tributery Report	1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1	LigerHenr	٥	X X Latioper No. Latioper No. No. No. No.<	I and a second sec
	ER 1.99 Devi 1 	School Logic IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User IA-User IA-ACL: IA-ACL: IA-User IA-ACL: IA-ACL: IA-User IA-ACL: IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-I	Aduba PCT	According to the second s	Parties Note	Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II	20 20 2 20 2 20 2	Lagerbluer	٥	Lastagen Lastagen Hen Soon	I Little Provided in the second
	ER 2000 Devel 52 A 2 2 1 2 2 7 2 2 2 A 2 2 1 2 2 7 2 2 A 2 2 1 2 2 2 7 2 2 A 2 2 1 2 2 2 2 7 2 A 2 2 1 2 2 2 7 2 2 A 2 2 1 2 2 2 2 7 2 A 2 2 1 2 2 2 2 2 A 2 2 1 2 2 2 2 A 2 2 1 2 2 2 2 2 A 2 2 1 2 2 2 2 2 2 A 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	School Logic IA-User Review-2005-ACL read Ends Eats Weden Leve / AL (1997)	Aduba PCT		Parallel Notetow Natetow Thereway Reprint Street St	1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1	LigenHoon in Si 2017 and 2019 well 2017	٥	Latinger les latinger	I I I I I I I I I I I I I I I I I
	ER 2.ev Devri *2 ER 2.ev Devr	Scheduling IA-User Review-2005-ACL A-User Review-200	Aduba PCT		Parties Partie	Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II	10 1	cognitions	٥	Lastager Lastager Hem Soo	
	ER 1244 Devit 52 ER 124	School Logic IA-User Review-2005-LACL- real Ends Entra Works-Lab / Labor Control Ends Entra Works-Lab / Labor Control Ends Entra Lab / Labor Control Control - 10, 11, 11, 11, 11, 11, 11, 11, 11, 11,	Aduba PCT		Parallel Notetow Natetow Thereway Reprint Street St	Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II	10 1	LigerHeer	٥	Lastager Lastager Hem Soo	
	ER 2.84 2.84 Dev 2.8 <td>Scheduler IA-User Review-2005-ACL IA-User Re</td> <td>Aduba PCT</td> <td></td> <td>Part Part Part Part Part Part Part Part</td> <td>Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II</td> <td>10 1</td> <td>LigerHenr</td> <td>٥</td> <td>Latinger Latinger Latinger</td> <td></td>	Scheduler IA-User Review-2005-ACL IA-User Re	Aduba PCT		Part Part Part Part Part Part Part Part	Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II	10 1	LigerHenr	٥	Latinger	
8	Eli 1244 Divert 52 Eli 1272 El 1 Eli 1	School Logic IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-User Review-2005-ACL: IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-IA-I	Aduba PCT	Image: Control of the contro	Reprint Part of Control of Contro	Interferent II Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent III Interferent II	10 1	Lagerbluer	٥	Latinger	I Little Provided in the second
	EB 2.000 Devit 50 Image: State Sta	United English Section 2005-24.CL: IA-User Review-2005-24.CL: IA-User Review-2005-24.CL: IA-User Review-2005-24.CL: IA-User Review-2005-2005-2005-2005-2005-2005-2005-200	Aduba PCT		Representation of the second s	I and See 1 I and See 1 I and Sec 1 I and	10 1	LogenHours	٥	Latinger	
	ER 2.84 2.84 7.84 Image: Second	Sete Lipit IA-User Review-2005-ACL ALUSER Re	Aduba PCT		Reprint Control of Con	I and See 1 I and See 1 I and Sec 1 I and	10 1	Lagerbluer	٥	Lastager	
	EB 2.000 Devit 50 Image: State Sta	School Logic IA-User Review-2005-ACL read Ends Eats Works Lob / AL (See Review-2005) (ACL (See See See See See See See See See See	Aduba PCT	P Antificularity Print Res	Rest Rest Rest Rest Rest Rest Rest Rest	I and See 1 I and See 1 I and Sec 1 I and		LigerHeer	٥	Latager Latager les sous sous latager les sous	I I I I I I I I I I I I I I I I I

A	<u> </u>	C	D	E	FG	н	1
A	IllUSR Server9		No	Never	37641.5 All	Never	No
-		Internet Guest Account					
	T IWAM_DC1	Internet Guest Account	No	Never	37542.60139 All	38376.37669	
	1 IWAM_Server2	Internet Guest Account	No	Never	38079.38125 All	Never	No
	1 NWAM_Server3	Web Application Manager account	No	Never	36446.67222 All	Never	No
	1 IWAM Server4	Web Application Manager account	No	Never	36608 6625 All	Never	No
	1 INVAM Server5	Launch IIS Process Account	No	Never	38215.68403 All	Never	No
	I IWAM Server6	Internet Guest Account	No	Never	37541.47917 All	Never	No
	1 IWAM Server7	Internet Guest Account	No	Never	37585.77361 All	Never	No
	1 NAM Server8	Internet Guest Account	No	Never	38302.4 All	Nevar	No
- 3	1 IWAM Server9	Internet Guest Account	No	Never	37641.5 All	Never	No
	1 alambourne	Allen Lambourne	No	38446.33264	38356.29097 All	38379.29308	
	1 mkirkaldy	March Kirkaldy	No	36427.36667	39337.36667 All	36372.36319	
	1 mkinsley	Miles Kinsley	No	36417.35803	38327.35903 All	36380.35486	
	1 mkent	Mark Kent	No	38462.39792	38362.35625 All	38364.35139	
100	1 dkinnear	Douglas Kinnear	No	Never	37799.72292 All	38367.36875	No
	1 mkimberley	Martin Kimberley	No	38432.37014	38342.37014 All	38380.36944	No
12	1 krbtot	the second s	Yes	37673.63472	37593.63472 All	Never	No
	1 abaotiste	Alfred Baptiste	No	36407.71319	38317.71319 All	36380.39792	
	1 mkennicot	Martin Kennicol	No	36399.34376	38309.34375 All	38373.36181	
	1 skelsev	Alan Kelsey	No	38419 67569	38329 67589 All	38343 36389	
	1 ekelso	Edward Kelso	No	38410.38333	38320.38333 All	38377.72153	
	1 akimberley	Alban Kimberley	No	38452.40069	38362.35903 All	38379.3625	
	1 elamport	Egbert Lamport	No	36403.40764	38313.40764 All	36379.55069	
	1 mlamport	Manuel Lamport	No	38466.36628	38376.32361 All	38370.35694	No
1	1 ekid	Emile Kid	No	38400.32708	38310.32708 All	38380.31389	No
	1 dkimble	Desmond Kimble	No	38427 42986	38337.42996 All	38379.39514	No
	1 dkinnear	Dudley Kinnear	No	38433.375	38343.375 All	36360.42153	
	l mkeys	Moms Keys	No	36424.34722	38334.34722 All	36360.34514	
	1 appras	App RAS account	No	Nover	38324.65833 All	37979.36968	
	1 apprepl	App Replication Account	No	Nerer	37772 99583 All	Never	No
	1 vndr	App Vendor	Yes	Necer	36105.43125 All	Never	Yes
	1 vendor	Application Vendor	Yes	Never	37583.5375 All	Never	Yes
	1 akirkaldy	Anthony Kirkaldy	No	36427.35972	38337.35972 All	36360.31319	
1	1 mkilham	Martin Kilham	No	36432.65278	38342.66278 All	36380.39722	No
,	1 Recep	Receptionist	No	Never	36327.34583 All	38380.33194	No
	1 skinslev	Angus Kinsley	No	38411.27292	38321.27292 All	38378.09722	
	1 ókeigwin	Dudley Keigwin	No	38466.45625	38376.41458 All	36360.31944	
	l alahay	Absalom Lahey	No	36435.37647	38345.37847 All	36373.69061	
				Never		36243.66656	
	1 rtest	rtest	No		38243.65278 All	30243.00000	NO
	1 mkempster	Morris Kempster	No	38468.39066	38378.33899 All	38379.33642	NO
	1 skendrick	Allan Kendrick	No	38396 33472	38306.33472 All	38380 34583	
	1 mkilham	Martin Kilham	No	38393.43889	38303.43839 All	38376.47847	
18	1 ecometius	Ephraim Cornelius	No	36401.36606	38311.36806 All	36329.39444	No
	1 skelser	Andrew Kelsey	No	36410.33472	38320.33472 All	38379.78403	
	1 statements	Statements	No	Never	38170 38472 All	Neer	No
	1 Supervisor	Supervisor	Yes	Never	36104.63681 All	Never	No
	1 dkiersted	Dan Kiersted	No	38398.35764	38308.35764 All	38379.43956	
			No	36398.35764		36379.43956	
	1 alamport	Alan Lamport			38321.37639 All		
	1 ekinney	Enc Kinney	No	36447.37163	38357.32996 All	36360.31456	
	1 Sync Agent Account	Sync Agent Account	No	Never	36165 425 All	Never	No
	1 ekay	Edgar Kay	No	38445.37639	38355.33472 All	38380.38194	
	1 ekendrick	Evelyn Kendrick	No	38432.31736	38342.31736 All	38377.36875	
	1 TLR	Teller branch 1	No	Necer	36202.75278 Sun(5-24)Mon(5-24)Tue(5-24)Wed(5-24)Thu(5-24)Fri(5-24)Sat(5-16	38380.31389	No
	1 TLR2	Teller branch 2	No	Never	35104.65754 Mon(5-24)Tue(5-24)Wed(5-24)Thu(5-24)En(5-24)Sat(5-14)	36038.36619	
	1 TLR3	Teller branch 3	No	Never	36115.72917 Mon(5-24)Tue(5-24)Wed(5-24)Thu(5-24)Fn(5-24)Sat(5-16)	38380.3626	
	1 TLR4	Teller branch 4	No	Never	36108.66181. Moni5-24/Tue/5-24/Wed/5-24/Thu/5-24/Fn/5-24/Sat(5-16)	38321 38958	
4		Reply with Changes End Review	A COMPANY OF A COM	(sector)	an say on the swelling verticed are receiptive interaction and well increases and vertice 24(58)(5)(8)	100.00 1.000906	
		a service of the serv	3				
13	→ & 1						
ι.	В	C	D	E	F G	н	1
	TLAS	Teller branch 5	No	Never	37027 35486 [Mon(5-24]Tue(5-24)Wed(5-24)Thu(5-24)Eri(5-24)Sat(5-16)	38329.36944	
	acomelius	Angus Cornelius	No	38466 36042	38376.31875 All	38377.55556	No
	1 mkeith	March Keith	No	Never	38061.53958 All	36360 33611	
	1 TsinternetUser	TsinternetUser	No	Never	37533.62292 All	Never	No
	1 elamb	Edwin Lamb	No	38439.325	38346 325 All	36379.70694	NO NI
	I VBE_ADMIN		No	Never	36521.47639 All	36217.69792	
- 1	1 Vinca	Vinca Login	No	Never	36159.99514 All	Never	No

- Copy to a new sheet, sort by Disabled account, and delete the remainder.

	1		1.0.000	Distance in the second	Contract Barriers	the second Property of	1000 CON 1000 C	Constant in the	and the second s	100
1.2	Sector 6		Futbale	ACISTINADER	Frontigontalling	Pendatchering	Lagotraiga	LastLopeTate	Haddan	
1		A488-1012-210038	Symenification (0000000-2701-668-4696-6200/0FDFT4F)	1746	Ruthment	Trevel .	4	North	160	1
3.7		Menedia	Microall Scholuler FreeBerry Corruntor	THE	Rinkwan	Report Contractory	A second seco	Nove:	190	
4	. 1	aulites .	Auditors	Criefs .	370/2 3660	37683 43618		256134660	ilio .	
5		auditor Fedire	Auditos Fodire Intechto	Yes	Never	30206-02704	M	Never	160	
8		Ocent		illes :	New	18051-40973	14	Sever	190	
1		Ocent In Head		Tes .	3/9/18382	36081-6093 370816093 3610403003	14	Nov	illu.	
5	1	Department	Signervisor	liner .	News	38104 (2007)	4	Nov:	Ac.	
9		mention	Application Vander	Then .	New	37888.8376	LAR .	Nistr.	Tes :	
10		mak .		144	7/8181	36185.45135	44	799491	Tee:	
							Contract of the second s			
21										
51										

- Copy to a new sheet, sort by Dialln account, and delete the remainder.

-	AL	-	100 million (100 million)				1 1 1 1 1			 	 -	-	 -	-		
1.2	100	100 A	6	100 B	and the second se			1000	-	 		- 17	9		- 10 -	1
1.3	Stand.	Usel	Fulbane	AcctDisated	PtodiciposiTine											
11		Advise yasta	Advington	He	Terrer	37628.847923A8	35306.30581	140								
4.1	1	410705	App HAS advoced	Ne	News	BESCH AMERICAN	57978-30968	Yes								
4		Interest		Ma	16040	37908 46242 A8	Parent	Tes .								
5.	1	minor	Malorite Lary	Mr	59461 59323	56578 54167 AR	36579-48034	Yes								
8	1	results	Application Vession	Yes	/lievel	27583-6375-AB	Next	Yee.								
2	1	matr .	App Vendor	Yes.	(Sever	36405-43125;44	(Seve)	Tes.				-				
87																
9												-				
887												-				

10000

- Copy to a new sheet, sort by Password Expires (primary sort) and Password Last Set Time (secondary sort).

4	 A Recot 							
1.		6.	0	House House	P	- H		
1.54-0	Unier	Fathane	Acceloration (Parallization West	Pauli at Define Lippetaux	LASS.cooff.c	a 124	57
1100	COFE	CDPs Erect 1	No	Sea	30 YOM GEODAL AN	X110 X7		
	1.82	Tallat branch 2	190	Aur	381043575478er(5-201 ard: 20Wes(5-200 ard: 200 ard: 201	2133.20		
	(394	CSP's Read of	240	Acces	and an an an an and a start an	3628.373		
	3.94	Tolar trutch 4	No	Biver	31/25/81/31 Marcill Marcill 20(Twold 20(Trud) 20	3021 30		
	Cara	CSP's Branch 3	No	Sever .	BUIST2972A	2010 318		
	140		140	See.		1000		
		Teller Islandh 2			301151297234rd628Efax623QWell628EFax6238Fr6228Eax6Fr83			
	kacitup	Eackup for interest	No	789/87	SET ALL DATE AND A SALE AND A SAL	Marian	10	
	Arctane :	ActSama Account	140	New	10150 40.00 Al	Henry	10	
	Vecs	Mocal age.	100	Nove-	16150-99624 /M	Merce	161	
	Synt Agent Account	Sysc Agest Account	140	Sever	30 KG 425 At	Marine	10	
	CON	CSP3 Branch 1	No	New .	0E20: (V00) Al	30300.315		
1	2,4	Teller Joseful 3	396	TRAVEL	IEEE PEPERSON AND ADDRESS AND ADDRESS ADDR			
- 1	Recett	Recognization	No	Nover	3630° 3635 Ar	30000.301	vii Mac	
1	ART Saver?	Internet Georal Account	146	Nevic	984408/150/Al	Merior	5 hr	
	DAME START	Note Application Manager account	290	Note:	1446-67000 All	Manite	14	
	Dark	Dark	No	Sec.	2020 4 47	30377-454	55	
	AUGR Carrent	Imamat Guest Account	140	Sec.	20000-001-01 AV	Harris	14	
	WART, Sacart	White Application Manager account	12 C	New Contract	Butt 0.25 Au	Herei	10.	
	HE ADM	THE COMPANY OF A DECKED	Ric .	August .	36521-47638-Au	28217.897		
	FIGH SERVICE ACCOUNT	And a state of the	blo	Sever.	3000 19 000 19 00	3033.42		
	State of		240	Sever .	WYD HE WE AL		10.	
		warkup mit				Mantes		
-3	1.2	Taile breach 6	No	ANN .	37027 3535 (Har-JS-24)Tax/S-24(Wee/S-24)Tax/S-24(Fri/S-24)Sat/S-4()	20229 X8		
	0.046	CDR's Energh S	190	Sper	37027 39025 All	3079.333		
	Internal		190	New	3/06.008/M	Nerve	1105	
	Taidomatikai	TableAutUset	140	(Novel)	\$P\$0.4730-W	Martis -	144	
	USD Sever	Internat-Genet Account	Plo	Style:	\$7588.77301 All	Merer	He	
	TANK Second	Internet Salest Account	160	Never .	17486-17381 AV	Merrer	5 fai	
	NGR Sate6	inter at Genet Account	itio	Service .	2004: 129-7 AF	Adaptary .	50.	
- 1	1644/ Scout	Internet Gelet Actionst	140	Nove	\$154E #1917.34	Marine	144	
	BAR Saver	Internal Gaugal Accesant	140	News	SIND NAL	Maxim	Mar	
	MART General	minanat Gasot Account	140	Stores	27541 S.AI	Martin	Ma	
	NEP OCI	Imsenat Geant Account	240	Sever-	3754210195(A)	90303 529		
	NAME DOT	Interial Owen Almonth	246	Sever.	17542182199-Ar	10175.079		
	HICH-RE-JANK	Escolation Agent	140	2004	210H SE25F AI	21895.458		
	Back1		No	Boar	1/808 DBE AL		Ma	
		Batk]				Manut		
	bisection of the second	Yep Poplication Account	No	Aces -	8/072 secan As		Me	
	duning .	Douglas Kaineer	180	Ann.	17795-71200 Al	3067,368		
	Administrator	Adrikerine	No	Sever	37525.44732 Al	\$0500.300		
	analders	anal cura	90	New Concerns	31004 96082 [MI	11818.728		
	Tertical .	Sciana	190	Iberet .	3/067 381 25 All	2357.38		
	rotatk	Machillank	140	Nover .	58001-53568[Ai]	30303.528	11: No	
1.1	MSR Saver?	Internet Easted Account	240	(Briver	900% (9126)AL	Mene	Ma.	
	UNAD Growil	Intrenet Gazet Account	1960	ISAVET.	38/09-381-35 Ari	Marrie	No.	
	inidements	Shorway	140	Never	20170-38472 AI	Marter	840	
	with backgo-aparts	Einforge Deck & Apert	rile .	News	352°D 60003 A4	3010.518	OS No.	
	RER Salved	Attantal Account	146	Riser	38275-68412 Av	Marriel	144	
	NAM Scort	Lawy 115 Percent Access	Sic	April .	1825. BATMAN	Neur	10.	
	ined	dest	Sec.	Ant .	WEAT AND THE AN	NO23 MA		
	enabel	e salata	240	Gever	3001411M AI	Martin	10	
	AGR_Served	Internet Genere Account	140	364	X324 AI	Hear	No.	
	Wild Sevel	Harran Devit Account	90	Steen	30824 M	Marut	Ma	
	applos.	Apy FAS account	840	Novi	10304 \$4003 MI	27679.369		
	knigt.		Yes	37673-65472	5750343472(A)	Meror.	10	
	leadbox	duties.	10ee	37073 39643	17873 43Y 504e-8-301 xe5 34Wes8-2011x5 34Pr 8-365x6334	31901.648		
1	Visiteration 0	Visitin Harvecol	346	MORE L'OUT	JEXE D'OU' AL	30% 364		
	and the out	hitsen agene and a second seco		THE OWNER.	here's appendix a	WITTE ATM		

- The presentation Sheets contain formulas that point to the underlying raw data sheets.

Auditing Firm

		AnyBa Disabled					
inform	ation as of:	28-Jan-05					
Seq	User	FullName	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in ?
1	10838CCC-2F01-4969-A	SystemMailbox {10838CCC-2F01-4969-A51C-EEDB7CFDF74F}	?Unknown	Never	All	Never	No
2	AdminSch	Microsoft Schedule+ Free/Busy Connector	?Unknown	Never	All	Never	No
3	auditor	Auditors	12/18/03 9:31 AM	9/19/03 10:31 AM	Mon(5-24)Tue(10/7/03 3:31 PM	No
- 4	Fedline	Fedline Machine	Never	2/15/99 1:23 PM	All	Never	No
5	Guest		Never	3/7/00 9:50 AM	All	Never	No
6	krbtgt		2/21/03 3:14 PM	11/23/02 3:14 PM	All	Never	No
7	Supervisor	Supervisor	Never	11/5/98 3:17 PM	All	Never	No
8	vendor	Application Vendor	Never	11/23/02 12:54 PM	All	Never	Yes
9	vndr	App Vendor	Never	11/6/98 10:21 AM	All	Never	Yes
							1

Observations on Disabled Users:

- Guest account has been disabled, not deleted
- It appears that two vendor accounts are present, but disabled
- An auditor account is present, but disabled
- A Fedline user account is disabled
- It appears that each of these accounts is manually controlled with no password expiration.
- Purpose for each account should be determined to see if they are consistent with the institution's policies.

A	udit	ing	Ŧ	irm

			AnyBank					
			Dial In Users					
nform:	ation as of:	28 Jan-05					_	
Seq	User	FullName	Disabled ?	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in ?
1	Administrator	Administrator	No	Never	7/24/03 10:45 AM	All	1/28/05 9:17 AM	Ycs
2	appras	App RAS account	No	Never	12/3/04 1:24 PM	All	12/24/03 9:21 AM	Ycs
3	Internal		No	Never	9/9/02 11:03 AM	All	Never	Yes
4	mlacy	Malcolm Lacy	No	4/18/05 9:12 AM	1/18/05 8:12 AM	All	1/27/05 10:58 AM	Yes
5	vendor	Application Vendor	Yes	Never	11/23/02 12:54 PM	All	Never	Yes
6	vndr	App Vendor	Yes	Never	11/6/98 10:21 AM	All	Never	Yes
7								

Observations on Dial In Users:

These are the most dangerous accounts since they have authority to access the system remotely. The first four are active accounts that should be scrutinized.

- Administrator account has not been renamed
- Appras and Internal accounts appear to be generic account (generic user accounts are not good practice. They evade tracking individual responsibility for events in a forensic audit.)

			AnyBank Password Age				
tiorm	ation as of:	28-Jan-05	14331010145				
Seq	User	FullName	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in .
1	CSR2	CSR's Branch 2	Never	11/5/98 3:46 PM	All	12/9/04 8:49 AM	No
2	TLR2	Teller branch 2	Never	11/5/98 3:47 PM	Mon S-24 Tuel	2/21/0-1 9:19 AM	No
3	CSR4	CSR's Branch 4	Never	11/9/98 3:53 PM	All	12/13/04 8:58 AM	No
4	TLR4	Teller branch 4	Never	11/9/98 3:53 PM	Mon'5-24)Tuel	11/30/04 9:31 AM	No
5	CSR3	CSR's Branch 3	Never	11/16/98 5:30 PM	A//	1/28/05 7:38 AM	No
6	TLR3	Teller branch 3	Never	11/16/98 5:30 PM	Mon S-24)Tuel	1/28/05 8:42 AM	No
7	backup	Backup for servers	Never	11/25/98 12:29 PM	All	Never	No
8	ArcServe	ArcServe Account	Never	12/30/98 11:32 AM	All	Never	No
9	Vinca	Vinca Login	Never	12/30/98 11:53 PM	All	Never	No
10	Syne Agent Account	Syne Agent Account.	Never	1/5/99 10:12 AM	All	Never	No
11	CSR	CSR's Branch 1	Never	2/11/99 5:59 PM	All	1/28/05 7:34 AM	No
12	TLR	Teller branch 1	Never	2/11/99 6:04 PM	Sum(S-24)Afon(1/28/05 7:32 AM	No
13	Recep	Receptionist	Never	6/16/99 8:18 AM	All	1/28/05 7:58 AM	No
14	IUSR Server3	Internet Guest Account	Never	10/13/99 4:07 PM	All	Never	No
15	IWAM Server3	Web Application Manager account	Never	10/13/99 4:08 PM	All	Never	No
16	Bank	Bank	Never	3/16/00 9:36 AM	All	1/25/05 10:55 AM	
17	IUSR_Server4	Internet Guest Account	Never	3/23/00 3:53 PM	All	Never	No
18	IWAM Server4	Web Application Manager account	Never	3/23/00 3:54 PM	All	Never	No
19	VBE ADMIN		Never	4/5/00 11:26 AM	All	8/18/04 4:45 PM	No
20	EXCH-SERVICE-ACCOUNT	NAV for Microsoft Exchange	Never	12/14/00 3:38 PM	All	1/28/05 10:05 AM	No
21	backup_svc	backup_svc	Never	1/19/01 2:28 PM	All	Never	No
22	TLR5	Teller branch 5	Never	5/16/01 8:31 AM	Mon(S-24)Tue(12/8/04 8:52 AM	No
23	CSR5	CSR's Branch 5	Never	5/16/01 8:33 AM	All	1/26/05 7:46 AM	No
24	Internal		Never	9/9/02 11:03 AM	All	Never	Yes
25	TsInternetUser	TsInternetUser	Never	11/23/02 2:57 PM	All	Never	No
26	IUSR_Server7	Internet Guest Account	Never	11/25/02 6:34 PM	All	Never	No
27	IWAM_Server7	Internet Guest Account	Never	11/25/02 6:34 PM	All	Never	No
28	IUSR Server6	Internet Guest Account	Never	1/20/03 11:30 AM	A//	Never	No
29	IWAM_Server6	Internet Guest Account	Never	1/20/03 11:30 AM	All	Never	No
30	IUSR_Server9	Internet Guest Account	Never	1/20/03 12:00 PM	A111	Never	No
31	IWAM_Server9	Internet Guest Account	Never	1/20/03 12:00 PM	All	Never	No
32	IUSR_DC1	Internet Guest Account	Never	1/21/03 2:26 PM	All	1/38/05 7:49 AM	No
33	IWAM_DC1	Internet Guest Account	Never	1/21/03 2:26 PM	All	1/24/05 9:01 AM	No
34	exch-nav-agent	Exch-NAV-Agent	Never	1/23/03 1:59 PM	All	10/1/03 11:00 AM	No
35	Bank1	Bank1	Never	3/3/03 2:50 PM	All	Never	No
36	appropl	App Replication Account	Never	5/31/03 11:54 PM	All	Never	No
37	dkinnear	Douglas Kinnear	Never	6/27/03 5:21 PM	All	1/1.5/05 8:51 AM	No
38	Administrator	Administrator	Never	7/24/03 10:45 AM	All	1/28/05 9:17 AM	Yes
39	emaildump	email dump	Never	8/1/03 11:47 AM	All	5/6/03 5:19 PM	No
40	finloan	tinloan	Never	9/3/03 9:09 AM	All	9/3/03 9:31 AM	No
41	mkeith	March Keith	Never	3/15/04 12:57 PM	All	1/28/05 8:04 AM	No
42	IUSR Server2	Internet Guest Account	Never	4/2/04 9:09 AM	A//	Never	No

Page 1 of 2

			AnyBank Password Age				
tiorm	ation as of:	28-Jan-05	-9-				
Seq	User	FullName	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in
43	IWAM Server2	Internet Guest Account	Never	4/2/04 9:09 AM	All	Never	No
44	statements	Statements	Nevar	7/2/04 9:14 AM	All	Never	No
45	exch-backup-agent	Exchange Backup Agent	Never	8/11/04 12:12 PM	All	8/11/04 12:26 PM	No
46	IUSR Server5	Internet Guest Account	Nevar	8/16/04 4:25 PM	All	Never	No
47	IWAM_Server5	Launch IIS Process Account	Nevar	8/16/04 4:25 PM	All	Never	No
48	rtest	rtest	Never	9/13/04 3:40 PM	All	9/13/04 3:44 PM	No
49	emailad	emailad	Nevur	11/10/04 3:10 PM	All	Never	No
50	IUSR_Server8	Internet Guest Account	Never	11/11/01 9:36 AM	All	Never	No
51	IWAM Server8	Internet Guest Account	Never	11/11/04 9:36 AM	All	Never	No
52	арртая	App RAS account	Nevar	12/3/04 1:24 PM	All	12/24/03 9:21 AM	Yes
53	krbigt		2/21/03 3:14 PM	11/23/02 3:14 PM	All	Never	No
54	auditor	Auditors	12/18/03 9:31 AM	9/19/03 10:31 AM	Mon(5-24)Tue(10/7/03 3:31 PM	No
55	mkennicot	Martin Kennicot	2/3/05 9:05 AM	11/5/04 9:05 AM	All	1/24/05 8:31 AM	No
56	mkilham	Martin Kilham	2/10/05 10:32 AM	11/12/04 10:32 AM	All	1/24/05 11:29 AM	No
57	akendrick	Allan Kendrick	2/13/05 8:02 AM	11/15/04 8:02 AM	All	1/28/05 8:18 AM	No
58	ekercher	Eustace Kercher	2/13/05 8:42 AM	11/15/04 8:42 AM	All	1/27/05 9:36 AM	No
59	dkiersted	Dan Kiersted	2/15/05 8:35 AM	11/17/04 8:35 AM	All	1/27/05 10:33 AM	No
60	mkennicot	Martin Kennicot	2/16/05 8:15 AM	11/18/04 8:15 AM	All	1/21/05 8:41 AM	No
61	ekid	Emile Kid	2/17/05 7:51 AM	11/19/04 7:51 AM	All	1/28/05 7:32 AM	No
62	ecornelius	Ephraim Cornelius	2/18/05 8:50 AM	11/20/04 8:50 AM	All	12/8/04 9:28 AM	No
63	adiotrephes	Archibald Diotrephes	2/20/05 9:34 AM	11/22/04 9:34 AM	All	1/28/05 9:15 AM	No
64	elamport	Egbert Lamport	2/20/05 9:47 AM	11/22/04 9:47 AM	All	1/27/05 1:13 PM	No
65	mkimberley	March Kimberley	2/24/05 8:37 AM	11/26/04 8:37 AM	All	1/26/05 5:27 PM	No
66	abaptiste	Alfred Baptiste	2/24/05 5:07 PM	11/26/04 5:07 PM	All	1/28/05 9:33 AM	No
67	akelsey	Andrew Kelsey	2/27/05 8:02 AM	11/29/04 8:02 AM	All	1/27/05 6:49 PM	No
68	ekelso	Edward Kelso	2/27/05 9:12 AM	11/29/04 9:12 AM	All	1/25/05 5:19 PM	No
69	ddyonysius	Douglas Dyonysius	2/27/05 9:42 AM	11/29/04 9:42 AM	All	1/20/05 9:11 AM	No
70	akinsley	Angus Kinsley	2/28/05 6:33 AM	11/30/04 6:33 AM	All	1/26/05 4:44 PM	No
71	alamport	Alan Lamport	2/28/05 9:02 AM	11/30/04 9:02 AM	All	1/25/05 8:41 AM	No

Page 2 of 2

Observations on Password Age:

The top of this list should be reviewed for users who no longer require system access. We should also look for users who have not changed password for an extended period of time.

- Many of the accounts on the list are generic accounts (not best practice), and should be reviewed for purpose and validity.
- Too many accounts' (including recep) passwords have not been changed since 1999. This is either poor policy or mis-configuration of system policy applied to this user.
- In general, quite a bit of attention should be placed on reviewing the accounts on this list.

Auditing Firm

			nyBank r Statistics					
nform	ation as of:	28-Jan-06		~				
Seq	User	FullName	Disabled ?	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in ?
1	10838CCC-2F01-4969-A	System Mailbax {10853CCC-2F01-4969-A51C-EEDB7CFDF74F}	Yes	Minimown	Nevar	Ali	Never	No
2	Administrator	Administrator	No	Never	7/24/03 10:45 AM	All	1/28/05 9:17 AM	Yes
3	AdminSch	Microsoft Schedule+ Free/Busy Connector	Yes	2Unimown	Navar	All	Navar	No
4	mlacy	Malcolm Lacy	No	4/18/05 9:12 AM	1/18/05 8:12 AM	All	1/27/05 10:58 AM	Yes
5	ArcServe	ArcServe Account	No	Never	12/30/98 11:32 AM	All	Navar	No
6	akiel	Anatole Kiel	No	3/1/05 2:00 PM	12/1/04 3:00 PM	Ali	1/26/05 11:24 AM	No
7	auditor	Auditors	Ycs	12/18/03 9:31 AM	9/19/03 10:31 AM	Mon(5-24)Tue(.	10/7/03 3:31 PM	No
8	backup	Backup for servers	No	Never	11/25/98 12:29 PM	Ali	Never	No
9	backup svc	backup svc	No	Never	1/19/01 2:28 PM	All	Never	No
10	okay	Ernest Kay	No	3/14/05 9:36 AM	12/14/04 9:36 AM	.411	12/14/04 9:36 AM	No
11	cerasmus	Edgar Erasmus	No	3/14/05 8:33 AM	12/14/04 8:33 AM	All	1/19/05 1:22 PM	No
12	ekipp	Eugene Kipp	No	4/12/05 9:19 AM	1/12/05 S:19 AM	All	1/28/05 7:50 AM	No
13	ekinghom	Elisha Kinghorn	No	3/13/05 7:52 AM	12/13/04 7:52 AM	All	1/27/05 7:46 AM	No
14	mkingston	Malcolm Kingston	No	3/13/05 7:57 AM	12/13/04 7:57 AM	.44	1/18/05 7:56 AM	No
15	mkimberley	March Kimberley	No	2/24/05 8:37 AM	11/26/04 8:37 AM	All	1/26/05 5:27 PM	No
16	adiana	Adrian Diana	No	3/22/05 3:06 PM	12/32/04 3:06 PM	All	1/25/05 9:50 AM	No
17	elterchar	Eustace Kercher	No	2/13/05 8:42 AM	11/15/04 8:42 AM	All	1/27/05 9:36 AM	No
18	ekennard	Ezekiel Kennard	No	3/24/05 1:43 PM	12/24/04 1:43 PM	All	1/27/05 10:43 AM	No
19	CSR	CSR's Branch 1	No	Never	2/11/99 5:59 PM	Ali	1/28/05 7:34 AM	No
20	CSR2	CSR's Branch 2	No	Never	11/5/98 3:46 PM	All	12/9/04 8:49 AM	No
21	CSR3	CSR's Branch 3	No	Never	11/16/98 5:30 PM	All	1/28/05 7:38 AM	No
22	CSR4	CSR's Branch 4	No	Never	11:9/98 3:53 PM	Ali	12/13/04 8:58 AM	No
23	CSR5	CSR's Branch 5	No	Never	5/16/01 8:33 AM	All	1/26/05 7:46 AM	No
24	mdiodorus	Malcolm Diodorus	No	4/3/05 12:01 PM	1/3/05 11:01 AM	All	1/28/05 10:02 AM	No
25	dicese	Donald Keese	No	4/5/05 9:22 AM	1/3/05 8:22 AM	.44	1/28/05 9:20 AM	No
26	ekeen	Euslace Keen	No	3/28/05 8:15 AM	12/28/04 8:15 AM	All	1/28/05 7:59 AM	No
27	mkieman	Michael Kieman	No	4/21/05 9:11 AM	1/21/05 8:11 AM	All	1/28/05 8:05 AM	No
28	akerr	Adam Ken	No	3/10/05 8:03 AM	12/10/04 8:03 AM	All	1/27/05 3:58 PM	No
29	akent	Alick Kent	No	3/13/05 6:36 AM	12/13/04 6:36 AM	All	1/27/05 12:52 PM	No
30	mkennicot	Martin Kennicot	No	2/3/05 9:05 AM	11/5/04 9:05 AM	All	1/24/05 8:31 AM	No
31	mkinsley	Mark Kinsley	No	4/3/05 10:37 AM	1/3/05 9:37 AM	All	1/3/05 1:11 PM	No
32	ddyonvsius	Douglas Dyonysius	No	2/27/05 9:42 AM	11/29/04 9:42 AM	.411	1/20/05 9:11 AM	No
33	akinghom	Alfred Kinghom	No	4/11/05 10:31 AM	1/11/05 9:31 AM	All	1/25/05 2:38 PM	No
34	mkelly	Maximilian Kelly	No	4/13/05 9:25 AM	1/13/05 8:25 AM	All	12/3/04 8:05 AM	No
35	emailad	emailad	No	Never	13/10/04 3:10 PM	All	Never	No
36	emaildump	email dump	No	Never	8/1/03 11:47 AM	All	8/6/03 5:19 PM	No
37	adiotrephes	Archibald Diotrephes	No	2/20/05 9:34 AM	11/22/04 9:34 AM	All	1/28/05 9:13 AM	No
38	exch-backup-agent	Exchange Backup Agent	No	Never	8/11/04 12:12 PM	All	8/11/04 12:26 PM	No
39	exch-nav-agent	Excl-NAV-Agent	No	Never	1/23/03 1:59 PM	All	10/1/03 11:00 AM	No
40	EXCH-SERVICE-ACCOUNT	NAV for Microsoft Exchange	No	Never	12/14/00 3:38 PM	All	1/28/05 10:05 AM	No
40	Fedline	Fedline Machine	Yes	Never	2/15/99 1:23 PM	All	Neser	No
42	aking	Alfred King	No	3/6/05 2:09 PM	12/6/04 2:09 PM	All	12/6/04 2:10 PM	No
42	Guest		Yes	Never	3/7/00 9:50 AM	All	Never	No
44	Bank	Bank	No	Never	3/16/00 9:36 AM	All	1/25/05 10:55 AM	110

Page 1 of 3

			AnyBank					
			User Statistics					
touv	nation as of:	28 Jan -05	e ser blatistics					
	linton in or.							1
Seq	User	FullName	Disabled ?	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in ?
45	Bankl	Bankl	No	Never	3/3/03 2:50 PM	All	Never	No
46	finloan	finloan	No	Never	9/3/03 9:09 AM	All	9/3/03 9:31 AM	No
47	Internal		No	Never	9/9/0211:03 AM	All	Never	Yes
48	IUSR DC1	Internet Guest Account	No	Never	1/21/03 2:26 PM	AU	1/28/05 7:49 AM	No
49	IUSR Server2	Internet Guest Account	No	Never	4/2/04 9:09 AM	All	Never	No
50	IUSR Server3	Internet Guest Account	Nu	Never	10/13/99 4:07 PM	All	Never	No
51	IUSR Server4	Internet Guest Account	No	Never	3/23/00 3:53 PM	All	Never	No
52	IUSR Server5	Internet Guest Account	Nu	Never	8/16/04 4:25 PM	All	Never	No
53	IUSR Server6	Internet Guest Account	No	Never	L/20/03 11:30 AM	All	Never	No
54	IUSR Server7	Internet Guest Account	No	Never	11/25/02 6:34 PM	All	Never	No
55	IUSR Server8	Internet Guest Account	No	Never	11/11/04 9:36 AM	All	Never	No
56	IUSR Server9	Internet Guest Account	Na	Navar	1/20/03 12:00 PM	All	Navar	No
57	IWAM DC1	Internet Guest Account	Nu	Never	1/21/03 2:26 PM	All	1/24/05 9:01 AM	No
58	IWAM Server2	Internet Guest Account	Nu	Never	4/2/04 9:09 AM	All	Navar	No
59	IWAM Server3	Web Application Manager account	No	Never	10/13/99 4:08 PM	All	Never	No
60	IWAM Server4	Web Application Manager account	No	Never	3/23/00 3:54 PM	All	Never	No
61	IWAM Server5	Launch IIS Process Account	No	Never	8/16/04 4:25 PM	All	Never	No
62	IWAM Server6	Internet Guest Account	No	Never	1/20/03 11:30 AM	All	Never	No
63	IWAM Server7	Internet Guest Account	Nu	Never	11/25/02 6:34 PM	All	Navar	No
64	IWAM Server8	Internet Guest Account	No	Nover	11/11/04 9:36 AM	All	Never	No
65	IWAM Server9	Internet Guest Account	Nu	Never	1/20/03 12:00 PM	All	Never	No
66	alambourne	Allan Lambourne	No	4/4/05 7:59 AM	1/4/05 6:59 AM	All	1/27/05 7-02 /1M	No
67	mkirkaldy	March Kirkaldy	Nu	3/16/05 8:48 AM	12/16/04 8:48 AM	All	1/20/05 8:43 AM	No
68	mkinsley	Miles Kinsley	No	3/6/05 S: 37 AM	12/6/04 S:37 AM	.1//	1/28/05 8:31 AM	No
69	mkent	Mark Kent	No	4/10/05 9:33 AM	1/10/05 8:33 AM	All	1/12/05 8:26 AM	No
70	dkinnear	Douglas Kinncar	No	Never	6/27/03 5:21 PM	.1//	1/15/05 8:51 AM	No
71	mkimberley	Martin Kimberley	No	3/21/05 8:53 AM	12/21/04 8:53 AM	All	1/28/05 8:52 AM	No
72	krbtet		Yes	2/21/03 3:14 PM	11/23/02 3:14 PM	All	Never	No
73	abaptiste	Alfred Baptiste	Nu	2/24/05 5:07 PM	11/26/04 5:07 PM	All	1/28/05 9:33 AM	No
74	mkennicot	Martin Kennicot	No	2/16/05 8:15 AM	11/18/04 8:15 AM	All	1/21/05 8:41 AM	No
75	akelsev	Alan Kelsev	No	3/8/05 4:13 PM	12/8/04 4:13 PM	all	12/22/04 8:44 AM	No
76	ckclso	Edward Kelso	No	2/27/05 9:12 AM	11/29/04 9:12 AM	All	1/25/05 5:19 PM	No
77	akimberley	Alban Kimberley	No	4/10/05 9:37 AM	1/10/05 8:37 AM	All	1/27/05 8:42 AM	No
78	elamport	Egbert Lannort	Nu	2/20/05 9:47 AM	11/22/04 9:47 AM	All	1/27/05 1:13 PM	Nu
79	mlamport	Manuel Lamport	No	4/24/05 8:46 AM	1/24/05 7:46 AM	All	1/18/03 8:34 AM	No
80	ekid	Emile Kid	Nu	2/17/05 7:51 AM	11/19/04 7:51 AM	All	1/28/05 7:32 AM	No
81	dkimble	Desmond Kimble	No	3/16/05 10:19 AM	12/16/04 10:19 AM	4/1	1/27/05 9:29 AM	No
82	dkinnear	Dudley Kinnear	No	3/22/05 9:00 AM	12/22/04 9:00 AM	All	1/28/05 10:07 AM	No
83	mkevs	Morris Keys	No	3/13/05 8:20 AM	12/13/04 8:20 AM	All	1/28/05 8:17 AM	No
84	appras	Ann RAS account	No	Nevar	12/3/04 1:24 PM	All	12/24/03 9:21 AM	Yes
85	apprepl	App Replication Account	No	Never	5/31/03 11:54 PM	All	Never	No
86	vndr	App Vendor	Yes	Never	11/6/98 10:21 AM	All	Navar	Yes
87	vendor	Application Vendor	Yes	Never	11/23/02 12:54 PM	All	Never	Yes
88	akirkaldy	Anthony Kirkaldy	Nu	3/16/05 8:38 AM	12/16/04 8:38 AM	All	1/28/03 7:31 AM	No

Page 2 of 3

			AnyBank User Statistics					
nform	ation as of:	28-Jan-05						
Seq	User	FullName	Disabled ?	Password Expires	Pwd Last Set	Logon Hours	Last Logon	Dial in 1
89	mkilham	Martin Kilham	No	3/21/05 3:40 PM	12/21/04 3:40 PM	Ali	1/28/05 9:32 AM	No
90	Recep	Receptionist	No	Never	6/16/99 8:18 AM	Ali	1/28/05 7:58 AM	No
91	akinsley	Angus Kinsley	No	2/28/05 6:33 AM	11/30/04 6:33 AM	Ali	1/26/05 4:44 PM	No
92	dkcigwin	Dudley Keigwin	No	4/24/05 10:57 AM	1/24/05 9:57 AM	АЦ	1/28/05 7:40 AM	No
93	alahey	Absalom Lahey	No	3/24/05 9:05 AM	12/24/04 9:05 AM	Ali	1/21/05 4:46 PM	No
94	rtest	rtest	No	Never	9/13/04 3:40 PM	All	9/13/04 3:44 PM	No
95	mkempster	Morris Kempster	No	4/26/05 9:08 AM	1/26/05 8:08 AM	Ali	1/27/05 8:03 AM	No
96	akendrick	Allan Kendrick	No	2/13/05 8:02 AM	11/15/04 8:02 AM	All	1/28/05 8:18 AM	No
97	mkilham	Martin Kilham	No	2/10/05 10:32 AM	11/12/04 10:32 AM	Ali	1/24/05 11:29 AM	No
98	ecornelius	Ephraim Cornelius	No	2/18/05 8:50 AM	11/20/04 8:50 AM	All	12/8/04 9:28 AM	No
99	akelsey	Andrew Kelsey	No	2/27/05 8:02 AM	11/29/04 8:02 AM	All	1/27/05 6:49 PM	No
100	statements	Statements	No	Never	7/2/04 9:14 AM	Ali	Never	No
101	Supervisor	Supervisor	Yes	Never	11/5/98 3:17 PM	All	Never	No
102	dkiersted	Dan Kiersted	No	2/15/05 8:35 AM	11/17/04 8:35 AM	Ali	1/27/05 10:33 AM	No
103	alamport	Alan Lamport	No	2/28/05 9:02 AM	11/30/04 9:02 AM	All	1/25/05 8:41 AM	No
104	ekinney	Fric Kinney	No	4/5/05 8:53 AM	1/5/05 7:55 AM	All	1/28/05 7:33 AM	No
105	Sync Agent Account	Sync Agent Account	No	Never	1/5/99 10:12 AM	All	Never	No
106	ekay	Edgar Kay	No	4/3/05 9:02 AM	1/3/05/8:02 AM	Ali	1/28/05 9:10 AM	No
107	ekendrick	Evelyn Kendrick	No	3/21/05 7:37 AM	12/21/04 7:37 AM	АЦ	1/25/05 8:51 AM	No
108	TLR	Teller branch 1	No	Never	2/11/99 6:04 PM	Sun(5-24)Mon(1/28/05 7:32 AM	No
109	TLR2	Teller branch 2	No	Never	11/5/98 3:47 PM	Mon(5-24)Tue(.	2/21/04 9:19 AM	No
110	T1.R3	Teller branch 3	No	Never	11/16/98 5:30 PM	Mon(S-24)Tue(.	1/28/05 8:42 AM	No
111	TLR4	Teller branch 4	No	Never	11/9/98 3:53 PM	Mon(5-24)Tue(.	11/30/04 9:21 AM	No
112	TLR5	Teller branch 5	No	Never	5/16/01 8:31 AM	Mon(5-24)Tue(.	12/8/04 8:52 AM	No
113	acornelius	Angus Cornelius	No	4/24/05 8:39 AM	1/24/05 7:39 AM	ЛИ	1/25/05 1:20 PM	No
114	mkeith	March Keith	No	Never	3/15/04 12:57 PM	АЙ	1/28/05 8:04 AM	No
115	TsInternetUser	TsInternetUser	No	Never	11/23/02 2:57 PM	All	Never	No
116	elamb	Edwin Lamb	No	3/27/05 7:48 AM	12/27/04 7:48 AM	All	1/27/05 4:58 PM	No
117	VBE_ADMIN		No	Never	4/5/00 11:26 AM	Ali	8/18/04 4:45 PM	No
118	Vinca	Vinca Login	No	Never	12/30/98 11:53 PM	All	Never	No
119								

Observations on User Statistics:

This gives a picture of key information about each user. Reviewing it allows us to get a "feel" for the user population. As mentioned before, a key issue with this audit is the practice of using a significant number of generic user IDs.

- A significant number of generic user accounts
- A significant number of accounts where the password never expires

Page 3 of 3

- A significant umber of accounts that are allowed to logon All hours (24x7x365 should be an UNUSUAL requirement.
- It <u>appears</u> that no review process of user accounts exists. This should be checked against policies and processes of the organization.

Perform the import of the Group-Col.txt

-

Al . 5 Gaug		_
A starting the second sec	and the state state of the stat	
120020306 IO 12 Art - Starstream Dec	CHEEKE (MARKAN) - SACE	1
12756	Comment	Type
According	Accurating Disperiment	01114
. Hillingston		User
Prilladaus		(base)
exa		Uteér
acchaldy		User
alonders		Utert
picedeci		1.hoet
accrisite weath		Unit
white		Mage
e andu		Milet
Adreester	-Advansating and Department	Global
direpton.		Over
magden		1.602.0
ad an applaint		User
anelas		User.
multian		Maet
avitalise.		Uppel.
Con Publishars	Exerption cartification and economy agents	Distal
OccuptorPary.	They should when on promitive to produce dynamic updates on on	actional.
Donwin Admins	Designated administration of the domain	Citte
Administrator		User
printy .		LARGE
Automa .		Upper
factor oc-		Lines
and a second sec		1.8444
and backgo-agam		User
auth-managert		Unar
ESCH SERVEL ACCOUNT		LAuger.
Internal		Upper
accept		there
and a		LAASA .
wide		User
al toler-		Quer :
Stargers.		Maar
Skilper		Ubet
Units.		12044
Danuan Consulers	All and stations and served provides the incruits	Contra .
Donien Consoleré	All denses contains in the damain	Ciccal
Domen Oceania	Al dense parts	Disbal
Gund	of these Parts	Chigh .
Demain-Open	Al defear cons	Gintal
WARSECT, 2401 grant &	and the line line is a second s	Lines
Address States		LAser
Administra		Maar
miacy		Uper
		Lines.
fac Saine.		Date:

Cut and Edit Paste Special Values into a raw data area. Sort the users and and delete blank lines.
 Image: Control of the control o

CAL IN A	ar lapeta-start
Contraction (allow)	
Contraction of the local section of the local secti	
Line	On glandiane
STREET, STOLENDA	Giolaid - Disruan Oams
5 abageliets	Global - Corrain Users
5 stapints	Clobal . Twail Users
7 statisty	Otdaal- Landing
6 accentilue	Global - Accounting
9 alaraha	Clinked - Chevain-United
increteries.	Goard - Exchilder
accentation	Global - Applicants
2 adate	Sobel - Conven Users
12 In Aurily	Olded - II mail Maper
4 adotourno	Global-Administration
A advergives	Gineral - Domain Users
a adulation and	Global - Ersal United
7 Acreiechater	Gobal - Durwin Admine
Accession of the local sector	Global - Darram Usera
Atranslation	Ginland - Extregation Admini-
20 Administrator	Gobel - Groep Pelicy Creater Owners
21 Administrator	Olobal - Schema Admina
Al Almenticle	Utokal SM3NDICAsmin
23 Administration	Local - Bad-up Epinterit
M Administrator	Locid - Advantegien
X Assistica	Goldel - Zorvale Menn
22 states	Global - Donwin Ailmma
27 whether	(Sobel-Darwin Users
20 stationy	Grobal: Consenthans
25 al-adouty	Gobul- EmailUnati
W alater	Global - Pread Users
21 abalaap	Global-Apptunes
gestele II	Qotest - reserved Accesse
35 al-alwey	Ookul - Munual Editory
M absoluce	Global: Accounting
YI wandick	Global - Sorvain Users
W glameber	Stobal - Excal Users
12 adminutes	Sitelah Aprilian
a abant	Global- Dumain Adminis
19 al yes	Global - Domain Users
E AND	Grant- Secol Upper
e wat	Golal- degliade in
C ##1	Oobel-AprilOpy
63 (al-344)	Otobal Information Systems
4 16-10T	Globol - Internet Access
al al anti-	Globol - NHS rupe Users
tin lakter	Global - Statute Merit
al al-ani	Global - Ciral Users
4 4 m	Oldest-AppTOsen
DV al. mi	Global-Lending
57. jet int	Gibbol - Correin (Aero
5° white	Clobal - Ereal Users
Si akambaray	Global - Conser Mees
predeck 12	Giotral- Ennal Goose
44 al-imberits	Older Lending

- Perform a Data PivotTable on the data area with user as the row, GroupType as the Column, and count of users as the data element.

								bhail	Discold +			
								WELL WELLING	- Your Article Articlet Articlet	an Agencar Bridator Delican Del	total - Do field - Ferdina	
											1 1	
								caelettus:		3	4 1	
								digen -				
Africa de la								Advertiging -		1		
											1	
								al alway		1	1 1	
								2-0900c.x			1 1	
								8-201			1 1	
								2-26			4	
								evener .				
								e-bighett			1 1	
								al-indep	1			
								alcohably.		- 0		
American 1 1 1 With the set of th								al antice of the			1 1	
	eente reter re							d largest is		*	R 1	
new manual and a second								acter of the second sec				
								Another a				
								sumption and the second s			21	
mentenine Sala S		<pre>mini i i i i i i i i i i i i i i i i i i</pre>						hanking				
		here here here here here here here here						Date			1	
								Bank1				
								CSR		12		
								CSPE				
								CORM			1	
								CIPS			1	
								Contra 1		- N		
								d-algol/s				
								dispersion i			1 1	
								do avende -			1	
				Breeters Section Se		Demenden wennen		Property Addresses				
							Draven to the second se	Danara Guesta				
	And I I I I I I I I I I I I I I I I I I I	And A A A A A A A A A A A A A A A A A A		And I I I I I I I I I I I I I I I I I I I	in in in in it is in the second secon	AND A A A A A A A A A A A A A A A A A A	in the second se	Domain Quess				
		And	And A A A A A A A A A A A A A A A A A A	The second secon	te de la	AND	in the second se	and the second second		-7		
AND A	And	A CONTRACTOR AND	A A A A A A A A A A A A A A A A A A A	And the second s	And I I I I I I I I I I I I I I I I I I I	AND	And the second s				- A - A	
AND	And A A A A A A A A A A A A A A A A A A	And the past of th	And the second of the second o	And the second s	And the second s	AND	The second secon	d-anti-			1 1	
AND	interesting to the second seco	En line line line line line line line lin	En Andre And	And	And	Contraction of the second seco	ANTE CONTRACTOR OF ANTINON	at addis				
KANNE E E E E E E E E E E E E E E E E E E	Enter a a a a a a a a a a a a a a a a a a a	interior e e e e e e e e e e e e e e e e e e e	inter te to te to the temperature te to te	KANNE AND	Enter a a a a a a a a a a a a a a a a a a a	HILL I I I I I I I I I I I I I I I I I I	Keise in a a a philipper and a					

- Format the presentation sheets to point to the underlying table. Copy and Edit Paste Special Values and Transpose the results of the totals into the second presentation sheet.

							_			_			Ar	yBa	nk																
Users and Groups	Global - Accounting	Global - Administration	Global - App1Ops	Sichal - App ILIsers	Global - Brench 1 Users	Globel - Domain Admins	Global - Domain Guests	Global - Domain Users	Global - Email Users	Global - Enterprise Admins	Global - Exchange Domain Servers	Global - Exchange Services	Oldbal - Group Policy Creator Owners	Global - identifiadmin	Global - Information Systems	Global - Internet Access	Glebal - Lending	Global - Manual Editors	Global - NetScape Users	Global - Schema Admins	Global - SMSMSE Admins	Local - Administrators	Local - Backup Operators	-ocal - DnsAdmins	Local - Exchange Enterprise Servers	- ocal - Guests	.ocal - Print Operators	Local - Replicator	Local - Server Operators	Local - Users	Grand Total
0838CCC-2F01-4969-A								1		_																					
paptiste			_			-	_	1	1	_		-	-		-		1	-			-	-		-				_			
comelius	1		_	1	-			1	1						-			-	-							_		_		_	-
diana	_				-			1	1	-	_	-	-	_	-							-	-			_	-	_		_	-
dictrephes		1				1	-	1	1					_	-		-	-	-				4	<u>.</u>				-		_	1
dministrator dmin Sch	_		-		-	1	-	1	-	1			1		-	-		-	-	1	1	1	1	-		_		-			2
dminSch	_	-	-	4		1		2	2	-		-		_	-		-	1	-		-	-	-			_		-		-	
kelsey kendrick				1	-		-	2		-					÷		-		-		-	-	-	-							
kent	- 1		1		-	1	-	1				-		4	1	1		-	1	-	-			-					-		
kerr	_	-	- 1	1	-	1	-	1		-	_	-	-			- 1	1	-	1		-	-	-		-	_		-	-		
kiel	_	-			-		-	1		-				-	-	-		1		-	-	-	-			-		-		-	
kimberley				-	-	-	-	1	1				-		-		4	-	-	-	-	-	-	-		-		-			1
king			-	-	-	1		4	4			-	-	-	-		-	-	-			-	-	-		-	-	-	-		1
kinghom	_			-	1	1		1	4				-	-	-		-	1	-			-		-		_		-	-	_	1
kinsley		1			<u> </u>	1	-				-			-	-		-			-	1	-	-	2 3						-	1
kirkaldy	1	- 1	-	1		-		1							1				1					-		-		-		_	1
ahev	- 1				-	1	-	1		-		-	-		-		-	-	1	-	-	-	-					-			
ambourne	_						-	1									1	10 1	-	-	-	-	-			-		_	-		1
amport	_		-	1			-	1					-		-				-	-	-	-	-			-		-			
opras		-			-	-	-	1				-	-		-	-	-	-	-	-	-	1	-	-			-	-	-		-
pprepl		-				1		1		-			-		-	-	-	10	1		-	1					-	- 1			-
rcServe	_			-		1		1		-	-				-					-		1		-					-		1
uditor		-			-	<u> </u>	-	1				-									-			2					-		
ackup	-	-				-	-	1		-		-			-			-	-	<u> </u>	-	<u> </u>	1						-		
ackup_svc			- 3			1		1													10 C	1	1	5		_			1		2
ank		-			1	-	-	1		-			-		-					-	-	-	- 1	-		_	-				
ank1		-			-	-	-	1				-			-	-		-	-		-	-	-	-			-	-		_	-
48			-		1	0.00	-	1			-		-		-						-	-	-			_		-		_	12
SR SR2 SR3	-						-	1		-			-			-					-		-				-				
SB3					-		-	1				-			-			-	-	-		-	-	-		-	-		-		-
SR4		-			-		-	1		-					-	-		1	8		-	-	-	2			-		-	_	
SR5					3 3	8 8		1									-	8 3					-	8		-		-		_	1
dyonysius		-		1	-	-	-	1			-	-		-	-	_	-	-	-	<u> </u>	-	-	-	-	-			-	-		1
keese		-		-	-	8		1					-		-	-	- 1				-	-			-		-	-		-	1
keigwin	_	-	1	_		1	-	1	1		-		- 10	1	1	1		0	1	-		1	-	-		_		-	-		
kiersted		-	-		-	- ·	-	1	1			-			-			-		-		- '	-				-				-
kimble		-			-	-	-	1	1		-		-	-	-	-	-	-	-		-	-	-	-				-	-	-	
kinnear		-	- 7					2					1		-	-		1	1		-	-	-	-				-	-		
omain Admins		-		-			-	~			-		-	-	-		-			-		1	1	1		_	1	-	1	_	
omain Guests			-		-			-		-		-				-		1				<u> </u>	-	-		1			- 1		1
omain Users			-	-	-	-			-			-	-	-	-			-	-		-	-						-		1	
comelius	_			1				1	1										1							-		-		-	1
erasmus		-						1	1						-	-	1		1		-	-						_			1
(ay			- 1			1		2		-			-		1		1				1			-					- 1		1
leen	-		12		1			1	1	1					1												1	-		-	
(elso		1				1		1									1													_	1
kendrick	1		1	1				1																							1
kennard	-					1		1	1										1											_	1
kercher			1	1				1	1	2							1		3		1			3 - 1		-	1	÷			
kid	1					1		1	1																					_	1
kinghom	-	1						1	1								1	1												-	1
inney			1	1	1			1	1	1					12 12				8												
dpp							1	1	1								1														
amb	1		1					1	1																						
amport	-					-		1	1																						1
nailad	_				1			1											1 2												1
naildump	-					1		1																						-	
nterprise Admins			1																			1									
kchange Domain Servers	_					1																-		1	1					-	1
cch-backup-agent						1		1				1										1	1					_			
cch-nev-agent					-	1		1				· · ·										()				_		-			1
XCH-SERVICE-ACCOUNT						1		1			1	1										1	1			_		-			
edine	-							1													-	-				_		-			1
Ioan	-			-				1		-					-				-		-	-		-		-				-	
		-				1																									
Jest			1		1		1			-								1										-			12

Page 1 of 2

														ıyBa																	
Users and Groups	Slobal - Accounting	Global - Administration	Slobal - App10ps	Slobal - App1Users	ildbal - Brench 1 Isers	Slobal - Domain Admins	Global - Domain Guests	Sidbal - Domain Jsers	Slobal - Email Users	Global - Enterprise Admins	Global - Exchange Domain Servers	Global - Exchange Services	Global - Group Policy Creator Owners	Slobal - identifiadmin	Global - Information Systems	Global - Internet Access	Slobal - Lending	Global - Manual Editors	Sicbal - NetScape Jsens	Sichal - Schema Vomins	Global - SMSMSE Admins	Local - Administrators	Local - Backup Operators	ocal - DnsAdmins	Local - Exchange Enterprise Servers	ocel - Guests	ocal - Print Derators	ocal - Replicator	.ocal - Server Operators	ocal - Users	Grand Total
USR DC1	0	O A	U.	U	05	OR	00	00	U.	03	00	00	00	U	00	DE	<u>o</u>	OU	00	03	्द	14	00			1	00	1	10	1	0
USR_Server2								1															-			1					
USR Server3					1			1			0																				
USR Server4		× 11			1		2	1			1						1														
USR_Server5	-		_	5	1		1	1			8						3				6		-			1				ii	1
USR Server6								1			1															1					
USR Server7					-			1																_		1	-				
USR_Server8				8			8	1	- 8		6	5			1 1		S (3	6		1		-	5 - 3	8	1				8	
USR Server9								1	1 - U																	1					
WAM DC1	1							1																		1				1	
WAM Server2		š 8]		8				1			0				1		8		5		2	- 3				1		-		11	
WAM Server3								1																					_		
WAM Server4								1																						1	
WAM Server5				1	(°)			1							1		S							1		1				1	
WAM Server6	2	2			6 A		3.	1	1 B		8 8	1					1	1	3					1		1	2			8	
WAM Server7			-					1																		1			-	1	
WAM Server8					-			1										-				_				1					
WAM Server9					1			1			2			-	1			1			2		-			1		1		6	
rbtat								1																							
ndiödarus	1		1		-			1	1								-														
nkeith	1			-				1			1						1				1							1		1	
nkelly								1	1		0.00																			8	
nkempster								1	1																						
nkennicot				2				2	2								1														
nkent		S		1	1 3		8	1	1		1				1		1				1	-		1						1	1
nkeys								1					-				1			-							-	-			
nkieman				1				1	1										-						-						
nkilham	-	1	-		1		-	2	1		8			-	-		8 - I	1						-			9	-		8	
nkimberley	-		-		1		-	2	2		0						2							-				-			
nkingston	1	1		-	-		-	1	1			-		-	-			-		-	-		-				-	_		-	
nkinsley		-	-	1	-			2	2		-	-		-			1						-	-				-		-	
nkirkaldy	-			1	-			1	1			-			-		1			-			-								-
nlacy			1	-	-	1		1	1		-	-		1	1	1	-	-	-	-	-	1					-	_		-	
nlamport		-	-	1	-		-	1	1	-	-	-						-	-	-	-	-	-	-			-	_	-	-	-
Recep			-		1	-	1	1	1	-	-		-					1	-			-	-	-		-				8	
test		2		-	-		-	1	-	-	-		-	-			-	-	-	-			-						-		-
tatements					-			1	-		-						-							-				-			
Supervisor	-	-	-	-	-			1	-		() ()						-					1				-		-		-	
Bync Agent Account			-		-			1	1								2			-		1		-						8	
LR	-			-	1		-	4	-		-						-					-		-		-		-			
LR2	-	-	-	-	-		-	1	-			-		-	-						-		-					-		-	
LR3	-			-			-	4	-				-				2							-							
LR4	-	-		-	-			1											-	-	-	-		-				-		-	
LR5				-	-			1			()			-	-		-				-			-		-		-		-	
sinternetUser	-	1	-		-		-	4	-					-			-				-	_		-		1		-		-	
/BE_ADMIN			-	-	-		-	4	-	-				-	-	-	-				-	4	1	-				-		-	
endor	-		-	-	1	1	-	1	-		-		-	-	-		-	-		-		- 1	1			-		-			1
ánca		-		-	-	1	-	1		-							-				-	- 1		-						-	
nnca ndr	-			-	-	1	-	1	-		1	-		-		4	-	-		-	-		-	-				-	-		1

Page 2 of 2

Auditing Firm

	Any	Bank	
Groups			
Global - Accounting	9	Global - Domain Users	117
Global - Administration	6	Global - Email Users	55
Global - App1Ops	5	Global - App1Users	18
Global - App1Users	18	Global - Lending	18
Global - Branch1 Users	5	Local - Administrators	18
Global - Domain Admins	16	Global - Domain Admins	16
Global - Domain Guests	1	Local - Guests	16
Global - Domain Users	117	Local - Backup Operators	1(
Global - Email Users	55	Global - Accounting	9
Global - Enterprise Admins	1	Global - Administration	(
Global - Exchange Domain Servers	1	Global - App1Ops	(
Global - Exchange Services	2	Global - Branch1 Users	(
Global - Group Policy Creator Owners	1	Global - Internet Access	(
Global - identifiadmin	3	Global - identifiadmin	:
Global - Information Systems	3	Global - Information Systems	
Global - Internet Access	5	Global - Manual Editors	;
Global - Lending	18	Global - Exchange Services	
Global - Manual Editors	3	Global - NetScape Users	
Global - NetScape Users	2	Local - Server Operators	
Global - Schema Admins	1	Global - Domain Guests	9
Global - SMSMSE Admins	1	Global - Enterprise Admins	
Local - Administrators	18	Global - Exchange Domain Servers	
Local - Backup Operators	10	Global - Group Policy Creator Owners	8
Local - DnsAdmins	1	Global - Schema Admins	19
Local - Exchange Enterprise Servers	1	Global - SMSMSE Admins	1
Local - Guests	16	Local - DnsAdmins	
Local - Print Operators	1	Local - Exchange Enterprise Servers	
Local - Replicator	1	Local - Print Operators	
Local - Server Operators	2	Local - Replicator	
Local - Users	1	Local - Users	
Grand Total	324	Grand Total	324

Observations on User / Group Statistics:

This gives a picture of the groups of authenticated users. Reviewing it allows us to see the number and specific users assigned to key groups. It should be reviewed with a member of operational management.

- There is only one (1) Schema and Enterprise Admin. This does not allow for a backup if that user should become locked out.
- There are sixteen (16) Domain Admins (16% of the accounts). This is not best practice. Domain Admins have the "keys to the kingdom" and can change other Domain Admin's rights. Many sources recommend (renaming "Administrator") creating Administrative accounts for individual's to use when Domain Administration tasks (or Enterprise or Schema extensions) are being performed. This allows better tracking of those tasks and prevents inadvertent changes while logged in with a regular (lower-level authority) account.

4.2 <u>Review Group Policy Objects and Assignment</u>

Running the GPO Management Console against the domain on a laptop with administrative access yielded the following GPO resultant report:

ED:\CSNA\GPDs\Administrator on VAIO.htm		- ET	Go Google "
	Group Policy Results		*
ministrator on DC/VAI0			
ministrator on DC/VAIO adw1 m 1/28/2016 9.24 00 AM #			bilde all Edda
iter Conliguration Summap			Ends Fails
Computer name	DOWW		
Donan Sw		rancico	
Social Last time film op Policy resolutioned	1/20/20	IE ST SEE ANI	
ap Policy Objects			Lide
splied GPUs			tada 😑
Nane Defe # Densen Fairs	Link Location addaméterina org	Revision #3 (21), Special (21)	
mind GPOs	attimesticen	2012/11/596-01201	Lide
New Gros	Link Location	Reason Denied	105
Name Local Scop Poley	Link Location Lites	Emply	
nite former Mumbership adam former Police was availed			Fall
5 UT TBACkinetiness BULTINALines HILLINALines HILLINALines HILLINALINE HILLINALINE USAN HILLINALINALINE USAN HILLINALINALINE USAN HILLINALINALINALINA HILLINALINALINALINA HILLINALINALINALINA HILLINALINALINALINA HILLINALINALINALINA HILLINALINALINALINALINA HILLINALINALINALINALINALINA HILLINALINALINALINALINALINALINALINALINALI			
Filters			Exte
Name New	Vahas	Belevence 6P0(s)	
Nore			
ponent Status			tinda:
Component Name Since Fully Infrastructure	Status	Last Process Time Contracts and the set Tracking status status wer- Tracking status status wer- Contracts and the set	
EFS represe	Sucano Sucano Success (no cata) Success Success	1/20/2005 8:30:10 Air	
LES solves) Reskty Sessily	Guccess	1/20/2005 9:20:07 AM	
Setting	30.0843	1/08/00/58/2018/48	3446
antiquestion Summary			Fall
ad			<u>tik</u>
User name Dematri	DC-selo at Linea	1979/07 1981 1971	
Densier Last ane Broup Policy Has processed	1/18/20	San San	
ap Policy Objects			÷a4.
ylind 6PDs			tate
Nome Deta Ji Dama n Falizy	Link Location ad.dumaname.com	Revision AD (1), Seven (1)	
United GPUs		we 1.5 state (0	t sdc
	Link Location	Resource Duminal	L94
Name Local Ocup Policy	Los	Empy	
			bin.
net portuga de la construcción d			Mar
Name None	Value	Reference GPO[s]	
Pone .			
Property Phylics			
penent Status	Circles .	Last Resserve Lines	hite
ponent Status Component Name FirmapPirmy Electroctan	Status Suscee	Last Process Time 1/28/2010 5 20 15 vol	1622
Component Name for a Pleny Electron Law a Configuration	Status Suares	Lost Process Time 1/78/01/6 9 70 15 mil	hite
Component Hane Gan appropriation tax a Configuration we Soliting	Status Siyarway	Last Ploces Time 1/2/07/05/2/01/5/20	
Comparent Nation Trans PPC of photomet An # Configuration # Configuration # Settings	Status Sumer	Last Process Taxe 1/26/01/015/2015/201	Naire Naire Naire
Comparent Nanc Drug-Proge Harmet Jac E Configurations was Sattings was Sattings David Processor	States Scaree		Nor Nor
Comparent Nanc Drug-Proge Harmet Jac E Configurations was Sattings was Sattings David Processor	Summer	Wang LPU	Naire Naire Naire
Canganan Haao Canganakan Katalaga Mag Marakan Mag Mang Mang Mag Mang	Summer Setting 7 Januaritud senerteened 20 days	Weang (PU Data Data New	Naire Naire Naire
Conjunct Nace Conjunctions Configurations ex Configurations ex Configurations exp Configurations exp Configurations exp Policy P	Summer Setting 7 Januaritud senerteened 20 days	Weang (PU Data Data New	Naire Naire Naire
Conjunct Nace Conjunctions Configurations ex Configurations ex Configurations exp Configurations exp Configurations exp Policy P	Susces Setting 7 assessed scructure 00 des 5 desarro 5 desarro 5 desarro	Weaking SPU Data Data Pray Base Data Pray Data Data Pray	Naire Naire Naire
Canganeer Hanie Canganeer Hanie Kanfageneer Waarden Hanie Waarden Hanie Polog	Summer Setting 7 Januaritud senerteened 20 days	Weang (PU Data Data New	Nu Nu Na Na
Caugased Hade Hade Caugased Hade Hade Hade Hade Hade Hade Hade Ha	Scaree Setting Township Conclane Oldes Oldes Debelor Debelor Debelor	Vieng GIU Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres	Naire Naire Naire
Caugased Hade Hade Caugased Hade Hade Hade Hade Hade Hade Hade Ha	Scaree Setting Township Conclane Oldes Oldes Debelor Debelor Debelor	Vieng GIU Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres	Nu Nu Na Na
Caugased Hade Hade Caugased Hade Hade Hade Hade Hade Hade Hade Ha	Scaree Setting Township Conclane Oldes Oldes Debelor Debelor Debelor	Vieng GIU Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres	Nu Nu Na Na
Conjunct Hade Conjunct Annue Conjunct C	Susces Setting 7 assessed scructure 00 des 5 desarro 5 desarro 5 desarro	Weaking SPU Data Data Pray Base Data Pray Data Data Pray	Nu 1 Nu 1 Nu 1 Nu 1 Nu 1
Compared Have Co	Scaree Setted Toeseta Sociales Obdet Catalone Under Dates Dates Setted S	Vieng S10 Data Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Data Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov	Nu Nu Na Na
Compared Have Co	Scaree Setting Township Conclane Oldes Oldes Debelor Debelor Debelor	Vieng GIU Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres Data Data Pres	Nu 1 Nu 1 Nu 1 Nu 1 Nu 1
Compared Name Co	Scaree Setted Toeseta Sociales Obdet Catalone Under Dates Dates Setted S	Vienes 510 Data Data Proy Basic Data Proy Data Data Proy	Nu 1 Nu 1 Nu 1 Nu 1 Nu 1
Caugas Haao Caugas Haao Caufanadan Santana Katalaga Caufanada Mariang PAS PAS Causas Halao Causas Halao Causas Halao Causas Halao Causas Halao Mariang	Scaree Setted Toeseta Sociales Obdet Catalone Under Dates Dates Setted S	Vienes STU Data Data Proy Data Data Proy	445 952 952 952 952
Caugas Haao Caugas Haao Caufanadan Santana Katalaga Caufanada Mariang PAS PAS Causas Halao Causas Halao Causas Halao Causas Halao Causas Halao Mariang	Surver Setting Towards Structure Order Content Under Database Setting Survers	Wrong 510 Data Data Proy Best Data Proy Best Data Proy Best Data Proy Best Data Proy Best Data Proy Data Data Proy	Nu 1 Nu 1 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2
Cauge and Hade Candination Statistication Statistication Statistication PAGE PAGE <td>Scaree Setted Toeseta Sociales Obdet Catalone Under Dates Dates Setted S</td> <td>Vienes STU Data Data Proy Data Data Proy</td> <td>445 345 342 342 342 342 342 342 342 343</td>	Scaree Setted Toeseta Sociales Obdet Catalone Under Dates Dates Setted S	Vienes STU Data Data Proy Data Data Proy	445 345 342 342 342 342 342 342 342 343
Conjunction Have Conjunction C	Raneer Setten Damen Strategie Characteristics Characteristics Characteristics Database Database Setten Setten Setten Setten Database	Vienny STU Data Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov Data Data Prov Data Data Prov Data Data Prov Part Data Prov Part Data Prov Part Data Prov Part Data Prov	Nu 1 Nu 1 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2 Nu 2
Conjunction Have Conjunction C	Rus est Setting Set	Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price	445 345 342 342 342 342 342 342 342 343
Conjunction Have Conjunction C	Rus est Setting Set	Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price	445 345 342 342 342 342 342 342 342 343
Cauge and Hade Candination Statistication Statistication Statistication PAGE PAGE <td>Raneer Setten Damen Strategie Characteristics Characteristics Characteristics Database Database Setten Setten Setten Setten Database</td> <td>Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price</td> <td>445 345 342 342 342 342 342 342 342 343</td>	Raneer Setten Damen Strategie Characteristics Characteristics Characteristics Database Database Setten Setten Setten Setten Database	Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price	445 345 342 342 342 342 342 342 342 343
Conjentional Ammedia Conjentional Ammedia Conjentional Ammedia Conjentional Ammedia Conjentional Conjentiona	Rus est Setting Set	Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price	445 942 942 942 942 942 942 942 942 942 942
Cauge and the add the a	Rus est Setting Set	Vieneg GTU Data Data Price Data Data Price Vieneg GTU Data Data Price	Nu 324 324 325 325 325 325 325 325 325 325 325 325
Cooperations and a set of a se	Rue est Setting Danskal structures Order Order Database Database Setting Section Sec	Vining STU Data Data Print Para Data Print Para Data Print Data Data Print	445 942 942 942 942 942 942 942 942 942 942
Cooperational Ansate Cooperational Ansate An	Rus est Settes	Wonney GYU Data Data Prive Verstag SPU Data Data Prive Verstag SPU Partition Prive Verstag SPU Partition Prive	Nu 324 324 325 325 325 325 325 325 325 325 325 325
Cooperations and a set of a se	Rue est Setting Danskal structures Order Order Database Database Setting Section Sec	Wonney GYU Data Data Prive Verstag SPU Data Data Prive Verstag SPU Partition Prive Verstag SPU Partition Prive	Nu 324 324 325 325 325 325 325 325 325 325 325 325
Cauge and the arrow of the arrow o	Rus est Setter Sette	Wonney GYU Data Data Prive Verstag SPU Data Data Prive Verstag SPU Partition Prive Verstag SPU Partition Prive	на 184 184 184 184 184 184 184 184 184 184
Cauge and Hade Cardination Cardination Station of Multian Offices Station offices Station offices Station offices Station offices Station Offices	Raneer Setten Setten Societaria Societaria Setten Setten Setten Setten Setten Setten Dataki Setten	Winney SPU Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price	uy Wa Se Se Se Se Se Se Se Se Se Se
Cauge and Hade Cardination Cardination Station of Multian Offices Station offices Station offices Station offices Station offices Station Offices	Raneer Setten Setten Societaria Societaria Setten Setten Setten Setten Setten Setten Dataki Setten	Winney SPU Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price	uy Wa Se Se Se Se Se Se Se Se Se Se
Conjection Conferencie Conferencie	Rus est Setter Sette	Wonney GYU Data Data Prive Verstag SPU Data Data Prive Verstag SPU Partition Prive Verstag SPU Partition Prive	uy Wa Se Se Se Se Se Se Se Se Se Se
Comparing Home Configuration Section and Product Se	Raneer Setten Setten Societaria Societaria Setten Setten Setten Setten Setten Setten Dataki Setten	Winney SPU Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price	на 184 184 184 184 184 184 184 184 184 184
Conjentioned Conference of the set of th	Raneer Setten Setten Societaria Societaria Setten Setten Setten Setten Setten Setten Dataki Setten	Winney SPU Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price Unset Data Price Data Data Price Data Data Price Data Data Price	чк Чк Усе Усе Усе Усе Усе Саба Чке Оба Оба Оба Оба Оба Оба Оба Оба Оба Оба
Compared Hade Compared Hade Compared Hade Stationary	Rus est Setter Sette	Wonog GYU Data Data Prive Data Data Prive Data Data Prive Wonng GYU Data Data Prive Vonng GYU Para Data Prive Data Data Prive Data Data Prive Vonng GYU Para Data Prive Data Data Prive Data Data Prive Para Data Prive Data Data Prive Data Data Prive Data Data Prive	на 184 184 184 184 184 184 184 184 184 184
Conjentioned Conferencie on an objective of a strateging of a strat	Rue est Series Serie	Views 570 Views 57 View	чк Чк Усе Усе Усе Усе Усе Саба Чке Оба Оба Оба Оба Оба Оба Оба Оба Оба Оба
Conjentioned Conferencie on an objective of a strateging of a strat	Rue est Series Serie	Views 570 Views 57 View	чк Чк Усе Усе Усе Усе Усе Саба Чке Оба Оба Оба Оба Оба Оба Оба Оба Оба Оба
Conjentioned Conferencie on an objective of a strateging of a strat	Rue est Series Serie	Views 570 Views 57 View	чк Чк Усе Усе Усе Усе Усе Саба Чке Оба Оба Оба Оба Оба Оба Оба Оба Оба Оба
Compared Hade Compared Hade Compared Hade Solar Hade	Rue est Series Serie	Wonog GYU Data Data Prive Data Data Prive Data Data Prive Wonog GYU Data Data Prive Vonog GYU Para Data Prive Data Data Prive Data Data Prive Monog GYU Para Data Prive Data Data Prive Data Data Prive	чк Чк Усе Усе Усе Усе Усе Саба Чке Оба Оба Оба Оба Оба Оба Оба Оба Оба Оба

This gives a picture of the policies that are delivered to a particular user (Administrator) when logging onto a particular computer (Sony Vaio). Here you can see the Security Group membership, the applied and denied Group Policies, and the Group Policy responsible for each setting applied.

Observations on Group Policy Objects:

- Notice that the Default Domain Policy is the "winning GPO" for several of the security related policies.
- Overall, it appears that Group Policy Objects are only being used for a minimum number of the settings that are available. A review of the Security settings section reveals that the "Default Domain Policy" was the only policy applied here. It indicates that:
 - 3 passwords are remembered
 - Maximum password age is 90 days
 - Minimum password age is 0 days
 - Minimum password length is 4 characters
 - Password complexity requirement is Disabled
 - Account lockout duration is 1440 minutes (24 hours)
 - Account lockout threshold is 5 attempts
 - Reset account lockout counter after 1440 minutes
- The minimum password length of 4 is weak. Enabling password complexity requires the password to contain at least three of the four categories of upper case letters, lower case letters, numbers, and special characters (which is disabled). Because the minimum password age is 0 and 3 passwords are remembered, a user can change his/her password four times in succession back to the <u>original</u> password on the fourth change.
- Lockout will occur after the fifth incorrect attempt at a password in any given 24 hour period. The counter will reset 24 hours after the last invalid attempt. This should be sufficient for most accounts, but consideration should be given to an infinite reset time (requires manual reset by a Domain Administrator) for accounts with higher levels of authority. This can be accomplished by keeping Domain Administrators and other groups with elevated authority in a separate Organizational Unit with its own Group Policy Object.

Group Policy Modeling was run against several users, two examples are shown here for illustration:

	Group Po	licy Modeling		
mainame\ekinney				
a collected on: 1/28/2005 11:56:34 AM Imany				hide a hid
many omputer Configuration Summary				hid
No data available.				10
eer Configuration Summary				hi
General				hid
User native		domainame/vekinney		
User container Domain		ad.domainame.com/West Branch ad.domainame.com		
Slowink processing		No		
Loopback processing		No		
Group Policy Objects				hid
Applied GPOs				hi
Name	Link Location		Revision	
Default Domain Policy	ad domainame.com		4D (2). Sysvol (2)	
Default Teler	ad domainame.com/West Branch		AD (2). Sysvol (2)	
Denied GPOs				bid
Name	Link Location		Reason Denied	
None	Last Location			
Simulated security group membership				hd
domainame'ekirmey				<u></u>
BULTINVIses dominane/Constructions Everyone BULTINVPerVindsvs.2000 Compatble Access NT AUTHORITYAudownicated Users NT AUTHORITYATIs Compatibility				
domaineme@West Tellers				
WMI Filters				hid
Namo	Value		Reference GPD(s)	
None				
Component Status				hid
Component Name		Status		
Group Policy Infrastructure		Success		
Internet Explorer Branding Registry		Success Success		
		pecca		
puter Configuration				hid
No data available.				
r Configuration				hid
indows Settings				hid
Internet Explorer Maintenance				hid
Connection/Proxy Settings				hid
Winning 6P0		Default Domain Policy		
Enable prove rettings				
Pielocal	Server		Part	
HTTP	192.168.1.1		80	
Secure	192 168.1.1		90	
FTP	192.168.1.1		80	
Gopher	192 168 1 1		80	
Socks	192.168.1.1		83	
Exceptions	Do not use proxy server for addresses begin Do not use proxy server for local (intranet) a		Enabled	
Iministrative Templates				bd
Control Panel				hd
Policy	Setting		Winning GPO	
Prohibit access to the Control Panel	Enabled		Default Teller	
Start Menu and Taskbar				hid
Policy	Setting		Winning 6P0	110
Foncy Remove Run menu from Start Menu	Enabled		Winning GPU Default Teler	

S.A. Mainte

nainame\akinghom	Group Pc	olicy Modeling		
collected on: 1/20/2005 11:55:19 AM				hide a
collected on: 1720/2005 11:55:19 AM				hide a
mputer Configuration Summary				hid
No date evalable.				
er Configuration Summary				bd
Seneral				bid
User name		domainame'vakinghom		
User container		ad domainame.com/East Branch		
Domein Slawlink processing		ad.domainame.com No		
Loopbook processing		No		
Group Policy Objects				hd
Applied GPOs				hd
Name	Link Location		Revision	
Default Domain Policy	ad demainame.com		AD (2), Syevel (2)	
Denied GPDs				hd
Name	Link Location		Reason Denied	
Default Teller	ad domainame.com/East Branch		Disabled Link	
imulated security group membership				hid
domicrane/ski/gham BUILTINU/lass/ BuiltINU/lass/ BUILTINU/lass/ NT AUTHORY/View/indexes/ NT AUTHORY/View/indexes/ domicrane/Ski/Tel/ski domicrane/Ski/Tel/ski BuiltINU/Ski/Ski/Ski/Ski/Ski/Ski/Ski/Ski/Ski/Ski				
A/MI Filters				hd
Name	Value		Reference GPD(s)	
Component Status				hd
Component Name Group Policy Infrastructure		Status Success		
Internet Explorer Branding		Success		
puter Configuration				hd
No dete exclusive				
No data available.				
Configuration				hid
Configuration indows Settings				hd
Configuration indows Settings ntemet Explorer Maintenance				hd
i Configuration indows Settings ntemet Explorer Maintenance Connection/Proxy Settings		Defaul Doman Felce		hd
Configuration Indews Settings Internet Explorer Maintenance Connection/News Settings Winning GPD		Defail Daman Folgy		hd
i Configuration indows Settings ntemet Explorer Maintenance Connection/Proxy Settings	Server	Detail Daman Folgy	For	hd
: Configuration Inders: Stellings Intens: Explore Maintenance Connector/New Settings Vinning GPO Enable pay setings	Server 192168.1.1	Deloai Doman Poley	Pot 00	hd
i Configuration Indent Stations Connector/Proof Settings Winning GPD Embel prop settings Factors Hittp: Sours	192.168.1.1 192.168.1.1	Defaul Esman Féley	80 80	hd
Configuration Connection/Yeavy Settings Connection/Yeavy Settings Viring GP0 Enable pays setting Patoos H1TP Socra TP	192168.1.1 182168.1.1 192168.1.1	Defail Donan Foley	80 80 80	hd
i Configuration Indent Stations Connector/New Settings Viroing CPD Englessons entrop Protog 10 P Score TPF Score	192,168,1,1 192,168,1,1 192,168,1,1 192,168,1,1	Ordaul Casson Folcy	80 80 80	hd
Configuration Connection/Yeavy Settings Connection/Yeavy Settings Viring GP0 Enable pays setting Patoos H1TP Socra TP	192168.1.1 182168.1.1 192168.1.1	Defail Essan Folg	80 80 80	hd

Observations on Group Policy Object Modeling:

<u>ekinney</u>

 Specifically, notice that the "Default Teller" would be the winning GPO for Administrative Templates that "Prohibit access to the Control Panel" and "Remove Run menu from the Start Menu". Also, no "Denied GPO's" exist, meaning that there would be nothing to prevent a GPO from being inherited by this account during log on.

<u>akinghorn</u>

 Here, notice that the same Default Teller GPO that would block access to the Control Panel and Run commands is being denied. This user would have those rights after logon. The "Denied GPO's" section shows the Default Teller GPO is a "Disabled Link". In this case, there should is not a legitimate reason for the denial. The account should be investigated to determine if the GPO is mis-configured or if this user (or another user with the rights to modify) has the explicitly denied the inheritance. In general, no GPO's should be denied, so a GPO denial should be a red flag to the auditor.

Password, account lockout, auditing, user access to services that allow the Run command and Control Panel, access to removable devices, Proxy settings, and more should all be delivered with Group Policy Objects.

4.3 Review Password Strength

No.20 Particle and Policy is Selected by Sec. Company Particle No.20 Particle and Policy is Selected by Sec. Company Particle and Policy No.20 Particle and Policy is Selected by Sec. Company Particle and Policy No.20 Particle and Policy is Selected by Sec. Company Particle and Policy No.20 Particle and Policy is Selected by Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy No.20 Particle and Policy is Sec. Company Particle and Policy is Sec. Po		Innet Formet In			and a state of the
Anter Control Difference Diff		21 P (1) A (4 D -	19-	- 9. E	-1131 Blas 100% Anal
Anter Control Difference Diff		and a state of a second	a Designation	C 4000	States and a state of the state
No.9 Particle and Policy is compared by the Character and Policy is compared by the Policy is compared by th			D	TENT	F G H I I I I K
10 Personal 0 000000000000000000000000000000000000	121104	LNRIANHASSWORD	1.2181	MUNPA	LAVAM INTERNAL INCOMES INCOMES MET-00
Head Josephan Build HeadLine Control and A	ent ?	"rierog" Veica		* Withing !	0 0
Image:	446.4	PECANPE		Maria.	er Science is i disconceptioned and in the Characteria International Conception and a state of the State of the second
Image: Provide State Stat	582	mang*		" Wilspind	0 0
Image: Provide State Stat	(R) aphentari	"manag" "manag" BEFE	× .		CASES AND THE PROPERTY AND THE READ FOR
Bit - Image Bit - Bit - Image Bit - Bit - Image Bit - Bit - Image Bit - Image Finance Color Colo	@ 1	ET F	Π.	1010	CO2FERED REELENCESSEFFED Bid 2n Av. Brate Fairs
	SMI -	mang"		" wasang "	8 8
diff - Act of 600000000000000000000000000000000000	583 101	manna"		" Wildling"	0 0
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	eckup 1	DACKUP	¥.,	100000	SACE OF STREPPENDED STORED IN EVENING
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	into Aquel	ARCEERVE REF P	1		OF DSDCE CREAKER SECTORS FIRSTER AND AN ADDRESS
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	SP IT	wares *		"winning"	0 0
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	1014-58P			M/s	AND PROCEEDINGS CONFERENCES IN A Street Frees
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	ingd is the	120	8 4560	120365	COLORIDA DE CONTRACTORISMO RELETA EN INVERTIGA EN LA CONTRACTORIZA
Set Form Disk Disk <thdisk< th=""> Disk Disk D</thdisk<>	and other	ELOW	÷	prime	F14F10R1413C1ER1450EE40010 Int Electory
Set Form Disk Disk <thdisk< th=""> <thdisk< th=""> <thdisk< th=""> Dis</thdisk<></thdisk<></thdisk<>	areb 1	POOREARD		to include a la	ENCLONESS FECTION FROM THE TOWN AND ADDRESS FROM
Set Form Disk Disk <thdisk< th=""> <thdisk< th=""> <thdisk< th=""> Dis</thdisk<></thdisk<></thdisk<>	hand it				LARGE AND STOLENES AND LARGE AND TO
Set Form Disk Disk <thdisk< th=""> <thdisk< th=""> <thdisk< th=""> Dis</thdisk<></thdisk<></thdisk<>	linider () Bobscho	AACEES/ ADHS		and and	PROFESSION AND ADDRESS AND ADDRESS AND ADDRESS ADDRESS ADDRESS ADDRESS
Set Form Disk Disk <thdisk< th=""> <thdisk< th=""> <thdisk< th=""> Dis</thdisk<></thdisk<></thdisk<>	indiana -	FRANKY PAPER	1 C	prog	NEW OFCI DEVICE THE AND HERE BODY BY THE BODY
Book and a second and a se	April 10	ALA/MA	1	alaping	INCADE 200298014702290342383 2121 Withold Factor
Book and a second and a se	offere	PEDENE	1	before .	A Exit CES DAY 10 SOCIAL SY BODY BY Clear Infe
Book and a second and a se	Annual 7	SABETPEA.	- N.	19401010	78AA87A CMEDICACE 008157840h Bre (Sectorary
Book and a second and a se	Ayamyaka 2 Lokar	SHOWNICES.H			REALIZED AND AND ADDRESS OF THE STREET
Book and a second and a se	karr 3	30408	*	in some	4584 MOXOFORDEDEDEDIRG*18d2h Seridinav Parce
Book and a second and a se	ACMED 1	RECEP	- K.	Notice inc.	TOW DESCRIPTION OF THE REPORT OF
Book and a second and a se	Arrist 1	HINTH'S	8.	Accession 1	DCBPETY ST7900405419570140h (in Oktionary
Book and a second and a se	page 1	RPLOSI INV	10.0	heres .	APPENDIX CONTRACTOR STATES AND A DATA AND AND AND AND AND AND AND AND AND AN
Book and a second and a se	A MOTORY	PASSWORD	1	provent	ESTADEBASETEAPERED TABLE In Octory
Book and a second and a se	(wights)	RHD WALL		Bat-Mill	ABT 10040 1000600000470477 adds 214 Birds Fore
Book and a second and a se	antours) forment t	ZANCA .	2	Dates	204125-40 DECTIONS14001240363 In Bry Bride Force
Book and a second and a se	aller -	AUG/10R4	- Re-	aution!	PRESERVICE OF BREACHERSTREET BALLED BALLED BY
Book and a second and a se	-Station 1	BNIC PEALMEET	- N	And Address of the	ADDRESS FAREP 2000 FC F101 Fd Dr Bra Crime Info Brand 110 Foreign 2010 FREE 2010 For The Transactory
Book and a second and a se	12 ADM	(ERTA)	4	VERITAG	5400-112790613604020781P(3alb) an Jähre Fore
Book and a second and a se	Addatos (HOLEA/IS		to bays -	# 2440 # 4157400.8200104041400 line 30ctorary 0830403 0749969023840030402 line Undersary
Book and a second and a se	ion I		1	-	SVE FORT BOOF SADEW, SCOUPT FOR SKYLF ADMEND.
Book and a second and a se	antres !		- A.	100	CONTRACT AND DESCRIPTION OF THE PARTY OF THE
Book and a second and a se	targoit) largoit	DLCOY	¥	avidy .	200 AVAIL TO BOARD ADDED THAT IN DESIGNARY
Book and a second and a se	athor wi	1011		ofo	ADELFORM COURSESACCOURTED Do 24 7m - Englis Parts
Book and a second and a se	14	CONSER.		Transfer	INTERESCONDINGUISION IN Merchan Fern
Book and a second and a se	508	mining*		"mong	0
Book and a second and a se	enter all and	CONTRACTOR -	×.	in Our field and a	CONVERSION/CONTRACTOR OF THE PARTY FARMER CONVERSION OF A CARACTERISTICS OF State Party
Book and a second and a se	kiel 👘	Contract of the local division of the local			COC24C03 4054050FDEC4F30148205FCF4FEAEETF
C F Instep CFUNDAUX FLOORUM CADDRESS (ADDRESS	ALC: N	10000		houthst	
Image Image <th< td=""><td>and a</td><td>nievos Pri kolai</td><td></td><td>traing</td><td>REACHER FEMALES CAROLECTOR IN THE PARTY</td></th<>	and a	nievos Pri kolai		traing	REACHER FEMALES CAROLECTOR IN THE PARTY
Chi I Intervent Comparing Control (Control Control C	EHILDS	1000 APM 1			
c who Control	Ref. 1	544KM		states.	OPDINARY FAR USED AT POLY OF DR JN SKIN END & Farts
Teg T Processor Comparison Comparison <td>ington) oda</td> <td>2010</td> <td></td> <td>widg.</td> <td>42827568CC182434CC3008783.0x29 7m +Exem Parce</td>	ington) oda	2010		widg.	42827568CC182434CC3008783.0x29 7m +Exem Parce
Al 6 Instant Scalability Scalability TVASDOL 11: 2019; 70:3000 (1) - 8 this region VINIO percenter Scalability Scalability TVASDOL 11: 40 this region VINIO percenter Scalability Scalability TVASDOL 11: 40 this region VINIO percenter Scalability Scalability TVASDOL 11: 40 this region VINIO percenter Scalability Scalability TVASDOL 11: 40 this region Scalability TVASDOL 11: 40 this top Colability Scalability TVASDOL 11: 40 this region Scalability TVASDOL 11: 40 this top Colability TVASDOL 11: 40 this region Scalability TVASDOL 11: 40 this top Colability TVASDOL 11: 40 this top Colabi	AnterSet."	" minuting 1"	10	Preisone!	
NOTICE partnerset Exclusion Control (Control (Contro) (Contro) (Control (Control (Contro) (Control (Control (Contro) (keipsin .	DIPRA	- A	in or a	ACTIVITIES AN AVAILABLE FOR THE POST OF A PARTY SHOP
6 n control 000008 D10 A HERD EXECUTED 300 AND Control Transmitter W0000 1 1 100000 D10000 D10000 AND Control D10000 D1000 AND Control D10000 D1000 AND Control D10000 D10000 AND Control D10000 D10000 AND Control D10000 D10000 AND Control D10000 D10000 AND Control D100000 AND CONTROL D100000 AND CONTROL D100000 AND CONTROL D100000 AND CONTROL D10000000 AND CONTROL D100000000 AND CONTROL D100000000 AND CONTROL D1000000000 AND CONTROL D10000000000 AND CONTROL D1000000000 AND CONTROL D1000000000 AND CONTROL D1000000000 AND CONTROL D1000000000000000000000000000000000000	of back	PASSWUND	- 6-	panned and	C SA2AD # AV4 SACT 485AD PHILM TO SERVICE AND A SACT AN
State I Intelling Conference Windford pateware Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford Date Market and State And And Windford Windford Windford DAte market and State And And Windford Windford Windford OA market and State And State And State And State And	Aircher In.	COMPS :	1	in the second	OVERNED DE LA LEDER INDUDE DE DIE DA LE CARRA FRANK
DBH Image DH Set ADD/ADD/ADD/ADD/ADD/ADD/ADD/ADD/ADD/ADD	kerner Ainstep	CPCSS AATIN/CHD	- A.	2719	CASEGATA SERVICE CONTRACTOR CASEGATION ON DR. Contractory INVESTIGATION OF TRACTORY INTO CONTRACTORY CONTRACTORY
Order a Involution Control (Control (Contro) (Contro) (Control (Control (Contro) (Control (Cont(Cont) (Contro	120	211440381		stapsfilt	DEDUCTION CONTRACTOR OF A STATE O
Order a Involution Control (Control (Contro) (Contro) (Control (Control (Contro) (Control (Cont(Cont) (Contro	A Bendoor	ACCENT STREET		No.108	SEPTISTICS STORE FOR STREETS DE DY LES DANS BRID. DORDERES MONT RESERVADANCE DA DE DUNCE PRO-
HE K Konese KXX-00000000000000000000000000000000000	sione	D#4L04H	1	D'WRMAN .	SD0A71C3 27A2F0CH0C30FA0104 05 Det 3User lefts
Conception of the second		APPEN .	- 2	in the second	or so-and ADF 304004004308 (04 05 06 10 etc)
Conception of the second	(decored)	5. (ZAR)		North	20000387 6PGAA15027459F0004 (h De 1Daterwy
DP s proport BACCOUSTS ANALOCCUM TONUO (fr. 2m. Toner if one office) 64 s served BUTP PROFENSIONARE (F. B. Stort). Anno brush if one office) frame 63.F promote the StortPAT PROFENSIONARE (F. B. Stort). Anno brush if one office) frame frame 63.F promote the StortPAT PROFENSIONARE (F. B. Stort). Anno brush if one office) frame frame 63.F promote the StortPAT PROFENSION (frame tone) frame frame 64.F promote the StortPAT PROFENSION (frame tone) frame frame 64.F promote the StortPAT Promote tone frame frame 64.F promote tone frame frame frame 64.F promote tone frame frame frame frame 64.F promote tone frame frame frame frame frame 64.F promote tone frame fra	keloty i Kiloj	reveral). Decir		4444	DECCUDE ENDER/2010/ENGEDEICH DV DM, "CREDHIED"
CLF provide (#CONTRET_PERCENCE_PERCENCE) CONTRET_PERCENCE_PERCENCE CONTRET_PERCENCE_PERCENCE CONTRET_PERCENCE CONT	Minpod.	WAGONT	4	Nations,	BACZER/SIX ABADDOLSA/TDADH IN 29: 10 M/A Ferre
VA4517 professional (SAX2015) and Control (SAX2004000000) Control (SAX2004000000) Control (SAX20040000000000000000000000000000000000	Arth	Performin #		provable :	dur view reskutional des Altra Scille I'n 30m Shala Paris 36 Sender F471806 D5A9CA988 De Children (Trational)
ANTARY AN	dana 1	POSES WOLPOANSIZ	- K.	10000	SNE SKIDEL ARTISE SSAESTONADEDH ON Der «Diedinner»
A Mark COMPERSION OF THE CONTENT OF THE OFFICE	1264/06423	UDATEMENTS:		in all reads	10907 road of relationship and all of the trained
	and in the	HEST THURTY		daut	CHEVER, ANY TEDAY STEERING IN DR 1 Vol. 169
A REAL PROPERTY AND A REAL	right -	CORPORED L		164	Standard Processing and a second standard and a se

Сентальная 5 сента 5 сента	Twenty Furnered Twenty and the Twenty of the Twenty of the Twenty of the Twenty of the Twenty of the Twenty of the Twenty of Twenty of	Part Langel	Sectored II Sectored II Sectore Versity Sectore Sector	Linear Bab	The law of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control control of the control of	Childrey:	Cruck Model Hyped Dude Force User Mit Brade Force Occurrent Brade Force Distances Dist	T	1.1	Exertment - Under Tresser - Under - Under Tresser - Under - Under
5 5 5 5 5 5 5 5 5 5 5 5 5 5	APCSENCE UPC/2219 BAC(A)D DADY DADY PEN		Decemper ancient concertor con	SIGAT ADDITIONAL TO DOCTANES SO INFORMATION AND TO DOCTANES SO INFORMATION AND TO DOCTANES SO INFORMATION AND TO DOCTANES AND TAKEN AND AND AND TAKEN AND TAKEN AND TAKEN AND	BOX TYPE 74 A44-497 YT YERDONG CO YEARANG RECOVERY YOR BRANKS (L Alexandra RECOVERY YOR BRANKS) (L Alexandra RECOVERY AND ALEXAND SOL STRUCTURE AND YEAR AND ALEXAND SOL STRUCTURE AND YEAR AND ALEXAND SOL STRUCTURE AND ALEXAND SOL STRUCTURE AND ALEXAND SOL STRUCTURE AND THE SOL SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL THE ANY THE SOL AND ALEXAND SOL AND ALEXAND SOL THE ANY THE SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEXAND ALEXAND SOL ALEXAND SOL AND ALEXAND ALEXAND SOL AND ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL ALEXAND SOL AND ALEXAND SOL AND ALEX		Diste Force Veer tide Diste Tokse Diste These Disterents Disterents Disterents Disterents Disterents Disterents	o o o o la d		Pundle 24 hours Pundle 1 results p 22 days Pundle 1 results Pundle 1 results Pun
10 40, min 1770 A 1770	USCIDE BACADE BACADE BACADE BACADE BACADE PACE PRODUCT BACADE BAC		- yari 21 34 Sadi ya Sadi y Sadi y Sadi y Jani y Jani y Sadi y	Characterization of the Physical Activity of the physical activity of the Physical Activity of 2000 (Health Characterization activity) and the Characterization of the Physical Activity of Characterization of the Physical Activity of State (Characterization activity) and State (Charact	Advector PECANE A RECEIPT FOR A RECEIPT INSPECTOR FOR A RECEIPT FOR A RECEIPT INSPECTOR PARTY AND A RECEIPT FOR INSPECTOR PARTY AND A RECEIPT FOR A ACCENT A DEAD AND A RECEIPT A RECEIPT ACCENT AND A RECEIPT AND A RECEIPT A RECEIPT AND A RECEIPT A RECEIPT A RECEIPT AND A RECEIPT A RECEIPT A RECEIPT		Distriction Unior Internet Distriction Distriction Distriction Distriction Distriction Distriction Distriction Distriction	000		 p. 2.2 days b. Under T. weater b. 2.55 days b. Under T. weater b. 2.55 days
de uno PENA	DADY DADY PEST		Secret Help Secret Secret Josef Help Secret Secret Secret Secret Secret	In CONFERENCE IN ACCOUNT OF A CONFERENCE OF A	Conversion and a second		User Info Bruar Fuero Dictioners Dictioners Brule Poeto Dictioners Dictioners	a ng a a a	21 21 N 21 1	is Under Treinatz is Under Treina is Under Treinatz is Under Treinatz is 23 dere is Under Treinatz is Under Treinatz
nno. pros pron pron den den pron den den den den den den den de	DADY TRUTY PROJECT BINON HADLEY CORRE BUDYEN PRODUCED BUDYEN PRODUCED PRODUCED PRODUCED PROJECT PR		dairy (2015) (2015) (2017) (20	In CONFERENCE IN ACCOUNT OF A CONFERENCE OF A	SCHOOT THE DEADLOSAN SET BOOLSON ACCEPTOR DE DE TRANS CONTRONANCES REPORTED DE DE TRANS CONTRONANCES DE TRANSITE DE TRANS AND ANTES DE TRANS DE DE TRANS ANTES ANTES RECENSANE DE TRANS ANTES ANTES ANTES ANTES RECENSANE DE TRANS ANTES ANTES ANTES ANTES RECENSANE DE TRANS ANTES ANTES ANTES ANTES ANTES RECENSANE DE TRANS ANTES ANTES ANTES ANTES ANTES RECENSANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES RECENSANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES ANTES RECENSANTES ANTES A		Olimienies Dictienies Bruks Porce Dictienies Dictienies	a - Baa	21 21 N 21 1	 Under Treinate Under Treinate 2.3 ders Under Treinate
free groot groot de de de de de de de de de de de de de	PERSON ALLOW HALLEY CORPA ELEVEN ELEV		jerti(10) jerry helio helio jerrio sicole sicole	SULT SEARCH ACAD INTERNATIONS REPORT FOR SHARE AND INTERNATION STRUCTURE SEARCH AND INTERNATION FOR STRUCTURE AND INTERNATIONS INTERNATION CONTRACT DESCRIPTION	Service of the service of the service of the second service of the service of the second seco		Brole Porca Discourses Disclarates	61 E	- 41	in Under 1 earabl
2000 Verlag Verlag Dat Dat Dat Sold Sold Sold Sold Sold Sold Sold Sold	HAD BY CORE BUTTER BUTTER BUTTER BUTTER BUTTER BUTTER Feature		Levry helio	20 WHAT THE BENALT TRUMP TANKS DOWNLOW DOWNLOW CANDIDAL SHIPS ACCESS DEDUCTORY TO SERVICE AND DECIDE STATES.	DETECTION ANTERED DESCRIPTIONS ADDED		Distinges Distinges		- 44	in Under 1 einets
duetay Cal Cal Cal Cal Cal C C C C C C C C C C	CORR RUTE RUTE RUTE RUTE Part Part Part Part Part Part Part Part		i reallin I reallin I persivert I siccael	DICTION DON'T DON'T AND THE INPUT ACLESS ENDERGY TO SKY EARCED FEEDO IN HERE	7147PDF/ESD136138/BECSAA08E7169E		Burger Blank			a-Urde Treinita
Stat And S S S S S S S S S S S S S S S S S S S	PACTOROUS RELEASE * manage * manage * manage * manage * manage * manage		carovert Niccles	LI UPRIO TURVE AUDITORIO TURIL	ADD 335-2402001336-01206-42006-1144			-		is Under These
dowl K M M	* entrop * 7 milliong * 7 milliong * 7 milliong * 7 milliong *			ES2CADE/INBAGA234A3E108F3FA3KEBC	ISSUE /CARESPORT ACCESSION	1	Dictionary Dictionary	Ū	- 41	a Under Freihalte a Under Freihalte
dowl K M M	" mining " " mining " " mining " " mining "		* mining *:	00 00 00 00 00 00 00 00 00 00 00 00 00	BETAACHICEDERCENERCANED EEDMA	1	Distances BLA			is Under Learnin 16A
t danat bit rust	"wanty"		1 minutes 1 1 minutes 1	1			104	0		184
dowi bi r rue	PEALMER	No.16	Thissing T	1	1		NA .	i		185
1		260.00	* noting*	RESITIE DISSERTIVE FOR STEAL	THIC4275405415712760890007352	1	H/M Hybeid	- 1	18	In Linder & Sala
148	CORAGA	1	ciesta diane	CALORI DOAGODEGICAADOBLOGBO & NEE DOAGNES COMERCIAADOBLOGBO MONDE	CODE EVENTSE ESERCITES ABOVE ECONT EXCAPODAGE/ CREEKAV SO/ST/1444C28		Disteriery	- 9	- 41	b-Urder 1 south a-Urder 1 minute
	MALTEN		write:	1年4月2日1日1年1月8日1日日1日1日日1日1日	1.7" ROBELLISERIUP I THERISALIEVIC		Dotterary	Ĩ	1 21	a Under Treates
	OUTBACK DEVIDERA	7	(uffack debeta	WERE REPORTED AND THE REPORT.	CONTRACTOR	1	Dirate Fotos Dirate Fotos	- 4	16	6 12 digit g-23 daya le Undar 1 lana
enciet Gity	ELOOP A	1	partenti	AND DEPENDENT OF ANY REPORT OF A CON-	BIND TO DEPARTMENT PREMIUM PROVIDED AND AND AND AND AND AND AND AND AND AN	1	Dickering Dickering	1	11	& Under Triste a-Under Tristelle
nyi Min	SHOWWOBLE		pervective	204P07868351000686564F5AC412174	PECCHEROLOGIA CONTRACTORIA DO INTRA- TRACTORI DE CONTRACTORIA DO INTRA- TRACTORI DE CONTRACTORIA DO INTRA-	1	Endo Foeta	i i	- 31	+ Under Trenets
604 5	BOUGE GPUX		arb.	BOTH DOBALNE CONVERSIONAL STRENGT DIALES	DHER EFERCEDING EDUCATION DOFF (DCOP)	-	Brute Foets Elitate Foets	ê		It Code 1 has b-Unde 1 has
lat	TRUSTE	1	19495	CELASE ICTIVISIOP SAAD BLAVES AGEN	ACREPECTED/00/0747/CCF78294A6785	1	Dictorians	5	*1	a Under 1 winste a Under 1 winste
boghed	AREA.		pate	BODDERE: FOODSED-ACCENESES HOREE	ERE/D4EXED34/CT304/DEF3K-CS10/D44	1	Distances	i	- 31	in Under 1 winds in Under 1 kauf
color adapt?	PERP	-	, when the second se	400798611.FDEEDAAD/8436961406FF	Creating and an appropriate processing of the	1	Belde Folce	6	- 2	S-Ulder Treas
	PETP		wip	42027100E1 CTODE 3AAD061 SEED 4CHEET	CHER OWCCHERT DIST DISCUSSION CONTRACTOR				21	5-Under Freuer 5-Under Theur
	anc .		Line.	>HERICODE'SBOADACODARD(HARE)	LAURA THE POST AND ADDRESS OF THE POST OF		Use Info		31	is Under Literato
11- Mi	REAL CAM	- 7	f heldnen	NEW CONTRACTOR FOR THE ACTION	CONTRACTOR AND ADDRESS OF THE STREET AND ADDRESS OF THE STREET AND ADDRESS OF THE STREET		User into	- F	41	in Under Treinato in Under Treinato
sal. bourne	" mixing " 244CA	7010		SHI 224CHI FERANDER SERVICE	EECTIENT IDEIDASSATCASI/20064/000	- 1			3	NA In Coder 1 Nova
i aldy	HOLEASE		Politiges	IF2AIL/IN/RECORDER/IN/IE/REF/SIG	4-MARCHINELEY AREA BRIDEFIND	- 1	Octomes	5	- 11	a Under Trevelu is Under Trevelu
e ()	GRACIE.	1	gracia	40541153029829464429643986146488	10700000005190F100FE207004400006		Brute Fotos	0	2	8-Under Theur
near diadag		1		STATES STATES AND A DRIVE AND	THERE I GOLD DE TRUBES AL REPORT		User bits Etcale Force		25	a Under Linitete Di Under 1 Innue
5 m	120085		12082	COPERING RESIDENCE	ER TO PREZIDERADO ACTICORAEL		Ende Fotos	1		in-Under 4 Nouts In Under Theor
101	FOREFALL	1	Contral Contral	EDECADORE (N7 March 300 March 200 March 20	2014060A0071626A66776360A0178627	1	Buar Foace	30		+ Under Stillelant
di barley	TELLOW		caper.	30000005050200040A4030435851404000 F141314000090030A40304339851404000				0 E	- 41	a-Under Treinate a-Under Treinate
polt .	M/IOO62 -		progent.	EAL/EPIDE SCATAALEM BEF/40401	SCALACIERC SAVUALUE/EB/FOROSCEC		Etulo Folca	1	- 3	is Under I texal is Under Trevats
20	DHAMPAL		- Manerh	INFERIALIZED DECTRACIÓN DESENTADARE	PARMERA PREVIDENT AND AND CORTERS.	- 1	Boald Posts	1		In Under These
214	DESING OFOSS	1		CREATA DISCREDANCONDERINGHEE	30730807008750400780078087879			0	- 4	a-Under 8 warate
19	PURCH	1	Contract .	WERE AND THE REAL ADDRESS OF TAMES	CARDENARY MIDE AND EDUCATION AND A DECEMPTION OF A DECEMPTION	1		- 5		- Gride Trenela - Under Skiloars
el	REP. 151	2	repipet	RECOVERED STRATEGACTEMENT ADDRESS	STOP #PEORS AFAMILY AND PEPAGAMORPHIC	1	Page Force	1	- 10	a-Under 34 hours
where	DEACHES	- 1	Desches	404060FSA0AA86AAC0040605110HEE	BRY CONTRODUCTION STATE FOR STATE FOR STATE	1	Exupe Force	16	12	& Under 21 hours
8		1	1004	THE REPORT OF A DECK OF A DECK OF A DECK.	EE40/70/10 C2/0 EE00EE410E P/20/74	1	Our etc.	1	11	a-Under Treirato la Under Treirato
per la companya de la	SLEPPA:		i tupot i	CORRECTATION DAADIER MEET	P370383 F770F7083680 (777343F245	1	Hybeid	6	- 26	o-Under 1 sour
6	FEIT	1	1 (dead	CIMPORORIGA RECOMMENDATION OF THE PARTY AND ADDRESS OF THE PARTY AND ADDRESS OF THE PARTY ADD	AST/RECOTS/CONFIDENCE FORCE COMPOSABLE		User Info	- D	17 - 341	a-Under-4 heuter a-Under-Treetate
ngeder drick	BASTHU. PEICA	1	(babytet Orderad	APROVED DESCRIPTION AND DECK	SINDS KERLANDAY FY SHOVEN DEDUBING					e-Ulde 34 hoats e-Under-Electer
lan .	WAEIW012		Despergi2	AACEXHOLDS: THY HARD THROTH ACE 4F4	BREGAMICANTH DISTURBING THE	1	Hjind	1		in Under 1 earath
eg .	BUSCH	3	2 apret	3FORTR/DSERVERGAADOBKCK06140402	40817-4105-445058-40803009 D40081	1	Distances	E E	- 5	+ Unde Sit tours + Under 1 winste
and a	SHOTPER		oddersets occutpes	785AARAE0818E181282418802C9PSE	COST DIGAC FIRM INFIDATION OF	1	User Internety	1	- 11	a Under Treesda a Under Treesda
pot ety	MUST		inder	SCOPE PERMANENTAL PROPERTY ACCESS	\$2546134256966C168668C48380484	- 1	Dictioners	- 5	- 31	in Under Treinate in Under Treinate
Agent Account	FETF	1	- Mile	EXCLUSION CODED AND DE 25357 ACREE	C 407 DRCC BOOTF EGG7 EFG2ERCCOP OF6	1	Druge Force	i	- 2	d-Under 1 hour
d-ck	TPEMBER.		the time	Rec. and service of the second second	POLE-CONCERNENCIES OF MERSING 9-F8C868F08LTC/86A160E368FF6/F	1	Final France	10	- 3	4.12 days 9.29 days NA
223.93 R	" withing "	Note:				1	104	0		18A 18A
E.	7.emmp7	76118	17-massing 7			- 1	100, -	E.		100
	"emerg?	Note	* maxing*			1	FI/4.	ť		HA.
olius. D	PHIERAS. Phierce		pasch45 piseada	2010A08/FC70080173000073A844180	F-67 K000004-BK-40806F DED06C0029 (720	1	Dictionets	ê	- 3H	In Linder 1 workt
1 /16/80	POCHSEARIS VEHICAS	1	prettbear10 VERETAS	389/ED022/RECESALDY 18/48568041	44/CS19CSSEP5/08.108 EFC44SE0839 2486 - ROAD FOR CONCORDANCE	1	Habed Disks Force -	10. 11.	24	+ Under 1 retrate + Under 24 hours
	VICA	1.1	NOCE	475/99/2010/74/5A/0/99/2019/4/4/11	NIENEZITECKER DESELTEA/EN-TOEDEA	1	Case into	1	- 11	a-Sister 1 minute.
#1.00		1000	of an inclusion of the				-448			194
a Marti Bé	Augeolate	These a	i saitut	INTERECTORY ACCORDING TO A	DEFERSE OF PRODUCES POARFIEF EARDER	1	Distantey	1	- 41	in Unlier 1 sanate
a Arton M	Auchola FCDLAE		talitart Tedina	THEM OF BEAUTION AND ADDRESS ACHEE.	Drenersze iszkogsze bener kitaloade		Distancey User Inte 1928	E D	- 21 - 01	s-Linder I minute
a Marti Bé	Augeolate	area.	i saitut	THEM OF BEAUTION AND ADDRESS ACHEE.	CHEMICAL DESCRIPTION OF CARDAN		Distantey		13 13 8	
自然不足行 医二丁烯酮杂化可能用用充分可能含于吸一尿剂 对利用度加强的原则,可能用利用时可能把一一件,以下一个可	loop ook op gent ook op gent o	Imp EXALCANP Status Addition Status A	iong Exat Code I byte Aff Aff wint main Model main Aff Start Mark Bill Aff Start Mark Bill Bill Start Mark Bill Bill Bill Bill Bill Start Mark Bill Bill Stare Bill Bill <td>iong EVALUATE # # ionks.up wind main Addition # ionks.up wind main Market # ionks.up STATUSCALLER BERT # ionks.up BERT STATUSCALLER # ionks.up BERT STATUSCALLER # ionks.up BERT STATUSCALLER # ionks.up Market ALVEN # ionks.up STATUSCALLER # ionks.up ionks.up BERT ALVEN # ionks.up</td> <td>Image Image Long Image Long Image Long Image Long Image Long State Arth -</td> <td>Image EVALUATE Evaluation Distribution Mark Statute Constraints Add ** instraints A</td> <td>Image EVALUATE Evaluation Distribution Structure Content and an approximate state of the structure content and approximate structure content and approximate structure content and approxi</td> <td>inspect EVML/CMP insultance EVML/SUBJECT (DECEMPANE) EVML/SUBJECT</td> <td>integ Lives (Color Participant) <thlives (color="" participant)<="" th=""> Lives (Color Participan</thlives></td> <td>Internet Even Advance Direct Construction Constructin Construstretener Construction Construl Construction Constructin</td>	iong EVALUATE # # ionks.up wind main Addition # ionks.up wind main Market # ionks.up STATUSCALLER BERT # ionks.up BERT STATUSCALLER # ionks.up BERT STATUSCALLER # ionks.up BERT STATUSCALLER # ionks.up Market ALVEN # ionks.up STATUSCALLER # ionks.up ionks.up BERT ALVEN # ionks.up	Image Image Long Image Long Image Long Image Long Image Long State Arth -	Image EVALUATE Evaluation Distribution Mark Statute Constraints Add ** instraints A	Image EVALUATE Evaluation Distribution Structure Content and an approximate state of the structure content and approximate structure content and approximate structure content and approxi	inspect EVML/CMP insultance EVML/SUBJECT (DECEMPANE) EVML/SUBJECT	integ Lives (Color Participant) Lives (Color Participant) <thlives (color="" participant)<="" th=""> Lives (Color Participan</thlives>	Internet Even Advance Direct Construction Constructin Construstretener Construction Construl Construction Constructin

						2 990089	153334	03 ViReply with	Chenges End	Concerned to a second state of the
Microsoft Exc	el - GSNA-U	ser Review	-2005-Pa	sswordAud	lit.xls	A16 •	Kar =+Password B	Statistics/A11 C D	E	F
DER DR Vew					and the second second	1 Auditing Firm		A		
10001000 1000100			H. E + 11	11 IN 40 100%	Rei E	2	Pass	AnyBan word Crackir		s
- 4=			ATTAC TOPY	and the second second		4		nora oradia	goranoni	
A.	15	C 7	1	e		5 All Active User	Accounts	C ==	ck Method	
Court of Sea Crick	a Method [+] a Torce Dation	er Hdes	HA	104.86	Disest Title	6 7 TimeFrame	Brute Force		rbrid N/A	
a Under 1 romain		26) 6	11	11 38	8 N/A 9 a- Under 1 minute 10 b- Under 1 hour		26	11 2 6	11
in Under Linnen	10		6		24	11 c- Under 4 hours	15		6	
e-Order 24 trans	8				9	12 e- Under 24 hours 13 f-1-2 days	8		-	-
t 23 den Hann Kala	A IA	26	9		4	14 g-2-3 days 15 Grand Total	2 4 34	26	8 11	11
						19 20	,	#10		
						21 All User Accou	nts			
Count of Size - Kingd	a Method I-					22		Cra	ck Method	
Sout of Sug Court Read once (+ Drug NA • Under Trends • Under Trends	e Force Deter		88	100.89	lined Tatal	23 TimeFrame 24 N/A	Brute Force		/brid N/A	1
Under Trempte	- 0	22	1	-	0 41 24	25 a- Under 1 minute 26 b- Under 1 hour	18	27	6	12
Unche 4 häurn Unche 24 häurn 1-5 dage 2-3 ober			-			27 c- Under 4 hours 28 e- Under 24 hours	5 0 2 4		_	
1-C Alen	3				1	29 f-1-2 days 30 g-2-3 days	2 4			
and Total	10	7*	1	13	12 97	31 Grand Total 38	37	27	8 13	12
						39				
						8 1. Under 1 mark				

🛯 🖌 🔓 🖓 🖓	D 7 8.	6 R5 18 - 3	19-12-16	Σ • 21 %.	10 65 👜 10	0% - (
1990000	103 85 3 4	(B) ViReply			UTEN .	
A15 -		dStatistics A11			2	
A	в	C	D	E	F	G
Auditing Firm						01/28/08
		Δny	/Bank			
	Dee			atiatian		
5	Pas	sword Cra	icking St	atistics		
						_
All Active User	Accounts					
			Crack Me	thod		
TimeFrame	Brute Force	Dictionary	Hybrid	N/A	User Info	Grand Tota
N/A				11		11
a- Under 1 minute		26	2		11	39
b- Under 1 haur	15		6			21
c- Under 4 hours	5					5
e- Under 24 hours	8			8	51	3
6 1-2 days	2			1		2
g- 2-3 days	4					4
Grand Total	34	26	8	11	11	90
1						
All User Accou	nts					
All User Accou			Crack Me	Alegad		_
TimeFrame	Brute Force	Dictionary	Hybric	N/A	User Info	Grand Tota
N/A	Diate Force	Dictionary	Hybrid	13	O ser mito	13
a- Under 1 minute		27	2	13	12	41
b- Under 1 hour	18		6		12	24
c- Under 4 hours	5		6			24
e- Under 24 hours	5		_			
e- Under 24 hours f- 1-2 days	2					2
g- 2-3 days	4					4
g- 2-3 days Grand Total	37	27		62	12	4
	37	27	8	13	12	9/

crosoft Excel - GSNA-User Review-2005-PasswordAudit.>

	Edit View insert For BIC Coll Coll 77 60, X					
	월 19 19 19 19 19 19 19 19 19 19 19 19 19				24 X4 14	49 100% • 10
A1	 Auditing Firm 		IS WITH THE PARTY	16., El	CI K GYIEW	3
A	B	D	- 15	J	K	L
lud	iting Firm	Piles a	and and then an effect of	1	_	
			ncial Institut ssword Lis			
_				Crack	Crack	
Soq	Username	Pwd Length	Crack Method	Time Hours	Crack Time Minutes	TimeFrame
1	Administrator	8	Hybrid Brute Force	10	23 8	b-Under1 hour
3	mlacy ArcServe	8	User Info Brute Force		<1	e-Under 24 hours a-Under 1 minute g-2-3 days a-Under 1 minute
4	skiel backup	8	Brute Force User Info	58	46	g-2-3 days a-Under 1 minute
6	backup_svc	5	Brute Force		25	b-Under1 hour
89	ekay eerasmus	6	Dictionary Dictionary Brute Force		<1 <1	a- Under 1 minute a- Under 1 minute
9	ekipp ekinghorn	7	Brute Force Dictionary	53	14	g-2-3 days a- Under 1 minute
11	ekinghorn mkingston mkimberley	6	Dictionary Brute Force		< 1 < 1 26	a-Under 1 minute a-Under 1 minute
13	adiana	5	Dictionary		<1	b- Under 1 hour a- Under 1 minute
14	ekercher ekennard	8	Dictionary Dictionary		<1	a-Under 1 minute a-Under 1 minute a-Under 1 minute
16	CSR	None	N/A			NA
17 18	CSR2 CSR3	None None	N/A N/A	-		N/A N/A
19	CSR4 CSR5	None None	N/A N/A			N/A N/A
21	mdiodorus	8	Hybrid		18	b- Under 1 hour
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	dkeese akaan	6	Brute Force Dictionary		41 < 1	Under Tage 0 Inder Tage Inder Tande 0 Inder Tande 0 0 0 Inder Tande 0 0 0 0 Inder Tande 0
24	mkiernan	6	Dictionary Brute Force	12	< 1 16	a- Under 1 minute
26	akent	7	Brute Force	43 54	45	g-2-3 days b-Under1 hour
27	mkennicat mkinsley	6	Brute Force Dictionary		43 < 1	b-Under1 hour a-Under1 minute
28 29 30 31	ddyonysius	10	Dictionary		<1	a-Under1 minute a-Under1 minute b-Under1 hour b-Under1 hour
31	akinghom mkelly	5	Brute Force Brute Force		26 25	b- Under 1 hour
32	emailad	6	Dictionary User Info	_	<1	a-Under1 minute a-Under1 minute
33 34 36 36 37	adiotrephas	4	Dictionary		<1	a-Under1 minute
30 36	exch-backup-agent exch-nav-agent EXCH-SERVICE-ACCOUNT	8	Brute Force		23 25 25	a- Under 1 minute b- Under 1 hour b- Under 1 hour
37	EXCH-SERVICE-ACCOUNT	5	Brute Force Hybrid		25 21	b- Under 1 hour b- Under 1 hour
38 39	aking Bank	3	User Info		<1	a-Under 1 minute
40 41	Bank1 finioan	4	User Info User Info		<1	a-Under1 minute a-Under1 minute a-Under1 minute N/A
42	Internal	None	N/A Brute Force			N/A b- Under 1 hour
43 44 45	mkirkaldy	5	Dictionary		< 1	a-Under1 hour a-Under1 minute
45	mkinsley mkent	7	Dictionary Brute Force		< 1 27	a-Under 1 minute a-Under 1 minute b-Under 1 minute a-Under 1 minute
48	dkinnear	5	User Info		< 1	a- Under 1 minute
43 49	mkimberlev abaptiste	5	Brute Force Brute Force	1	25 44	b- Under 1 hour c- Under 4 hours
	abaptiste mkonnicot	6	Brute Force		40	c- Under 4 hours b- Under 1 hour e- Under 24 hours
51 52	akelsey ekelso	8	Brute Force Dictionary	20	< 1	e- Under 24 hours a- Under 1 minute
53 54	akimberley elamport	6	Dictionary Brute Force	1	< 1 36	a-Under1 minute c-Under4 hours
55	mlamport	5	Dictionary		<1	a-Under 1 minute b-Under 1 hour
56	ekid dkimble	6	Brute Force Brute Force		69 4	b- Under 1 hour c- Under 4 hours
50 51 52 53 54 55 56 57 58 59	dkinnear mkeys	5	Dictionary		<1	a-Under1 minute a-Under1 minute
60	appras	9	Brute Force	9		e- Under 24 hours
61 62	appropl akirkaldy	7	Brute Force Brute Force Brute Force		46 66 26 12	e- Under 24 hours b- Under 1 hour
6 82 83 64	mkilham	7	Brute Force	15	12	e- Under 24 hours a- Under 1 minute
64 65	Recep akinsløy	0	User Info Dictionary		<1	a-Under1 minute a-Under1 minute b-Under1 hour
55 65 67 68 69 70	dkeigen alahov	6	Hybrid Brute Force	2	21 17	b- Under 1 hour c- Under 4 hours
68	alahoy rtest	5	User Info		< 1	c-Under 4 hours a-Under 1 minute
69 70	mkempster akendrick	8	Brute Force Brute Force	20	52 20	e- Under 24 hours c- Under 4 hours
71	mkilham ecornelius	10	Hybrid Brute Force	15	<1 29	a- Under 1 minute e- Under 24 hours
73	skelsey statements	5	Dictionary User Info	10	28 <1 <1	e-Under 24 hours a-Under 1 minute a-Under 1 minute
74	statements dkiersted	10	User Info Dictionary		<1	a-Under 1 minute a-Under 1 minute
76	alamport	6	Dictionary		<1 <1	a- Under 1 minute
71 72 73 74 75 76 77 78 79	skinney Sync Agent Account	5	Dictionary Brute Force		26	a- Under 1 minute b- Under 1 hour f- 1-2 days
79 80	ekay ekendrick	10	Brute Force Brute Force	33 68	26 54 7	f- 1-2 days g- 2-3 days
90 31 82 83 84	TLR	None	N/A		1	g-2-3 days N/A
82 83	TLR2 TLR3 TLR4	None None	N/A N/A			N/A N/A
84	TLR4 TLR5	None None	N/A N/A	_		N/A N/A
85 86	acomelius	8	Hybrid	-	18	b- Under 1 hour
87	mkeith	8	Dictionary Hybrid		< 1 < 1 24	a- Under 1 minute a- Under 1 minute
88 89 90	VBE_ADMIN	7	Brute Force	15		e- Under 24 hours
91	Vinca AdminSch	5 None	User Info N/A		< 1	a-Under1 minute
92	auditor	8	Dictionary		<1	a-Under 1 minute
93 94	Fedline Guest	7 None	User Info N/A		< 1	a- Under 1 minute a- Under 1 minute N/A
95 96	vndr vendor	5	Brute Force Brute Force		25 25	b-Under1 hour b-Under1 hour
97	Supervisor	6	Brute Force		25	b- Under 1 hour

Observations on User Passwords:

This allows us to determine the time window of risk should passwords be compromised.

- All passwords were cracked within 4 days
- Four (4) Domain Administrator level passwords were cracked in under a minute, eight (8) in under an hour, and three (3) more in under a day. This means that the password strength is <u>poor</u> for accounts with a very high level of authority.
- Twenty seven (27) of the 97 accounts (38%) were cracked using a Dictionary.
- Twelve (12) (12%) were cracked using some form of the user account ID
- Thirty seven (37) (38%) were cracked using Brute Force
- Forty seven (47) (48%) were cracked using some combination of user account information and Dictionary (did not have to resort to Brute Force)

And the loss of the second

4.4 Institution Policies related to passwords and users

PURGE POLICY

The Human Resource Department will notify the Information Systems Manager on the same day, of any and all terminated employees. Upon notification, the Information Systems Manager will remove immediately, from the Windows NT system, the User ID and associated passwords of all terminated employees.

PROCEDURES

- 1. The Human Resource Department will immediately notify the Information Systems Manager or his subordinate the same day an employee terminates from the bank.
- 2. System security procedures will call for the Information Systems Manager or his subordinate to remove the User ID and Passwords from the network as well as the e-mail system of the terminated employee immediately upon their separation from the bank.
- 3. The Security Officer will remove the terminated employee from accessing the Application System.
- 4. The Human Resources department will immediately notify the Information Systems Manager of any change in employee job function that would require the removal of Administrator privileges from that employee's user profile.

PASSWORD POLICY

Passwords are the primary means of correlating the user's identity to the system approval control process. Combined with the User's ID, the password will provide approved users with initial system access. The password will be selected by the system user and is to be known only by that person. The format of the password is free form, as long as it conforms to the following formatting rules.

PROCEDURES

- 1. Passwords will be comprised of a combination of alpha and numeric characters.
- 2. Repetitive character strings, such as 1111, 1234, ABCD and AAAA are not to be used.
- 3. The size of the password may range from a minimum of six (6) to a maximum of fifteen (15) characters in length.
- 4. Passwords are not to reference the names of any spouse, children, pet, first name or any other such name that may easily be associated with a specific user.
- 5. Passwords for all system users shall be changed every 90 days.
- 6. Whenever a password is being changed, the user must select a password different from that, which was just used.
- 7. Passwords may not be duplicated among system users, but must be unique.
- 8. Passwords may not be the same as the User ID, except for initial access.

Observations on Related Policies:

Policy review allows us to put the review of users, groups, Active Directory GPOs, and Password assessments into perspective of the stated objectives of the institution.

- The removal of users promptly of their termination should be reviewed against the password age report. It appears there may be several accounts in question.
- Over fifty (50) of the passwords violate the requirement to have a combination of letters and numbers.
- Over fifty (50) of the accounts have passwords that have not been changed in the required 90 day window.
- Several of the accounts have passwords that appear to violate the prohibition of names.

She maile

4.4 Conclusions

This Windows 2000/2003 Active Directory Domain is not secure from an account configuration and password perspective. If the physical access to the network has any vulnerability, the entire network and all of its information is vulnerable. Specific comments that would make the Executive Summary (written in a politically correct way) with specific recommendations for remediation are:

- Too many accounts have Domain Admin authority
- Password Policy is being violated
- Passwords, in general, are insecure
- Group Policy Objects are not implemented effectively
- Active Directory Password configurations are weak and do not match institution policy

References

University of Washington's School of Medicine <u>Windows Server 2000 Security</u> https://security.uwmedicine.org/Docs/Procs/MSWebsiteWin2000ServerSecurity.htm

Kathy Ivens <u>Getting Started with Windows Administration</u> - InstantDoc #40721 Windows IT Pro http://www.windowsitpro.com/Windows/Article/ArticleID/40721/40721.html

FFIEC Information Security - IT Examination Handbook December 2002 http://www.ffiec.gov/ffiecinfobase/html_pages/it_01.html#infosec

Microsoft Technet <u>10 Immutable Laws of Security</u> http://www.microsoft.com/technet/archive/community/columns/security/essays/10imlaws .mspx

SANS Institue <u>Top Vulnerabilities to Windows Systems</u> http://www.sans.org/top20/#w5

Peter Tippett, Chief Technology Officer of Reston, Virginia-based TruSecure™ Corp. <u>Calculating Your Security Risk</u> http://www.theciostore.com/watchit_product.asp?id=196

Microsoft Corporation <u>Security Risk Management Guide</u> Chapter 4: Assessing Risk http://www.microsoft.com/technet/security/topics/policiesandprocedures/secrisk/srsgch0 4.mspx#EAAA

Microsoft Corporation Group Policy Management Console Help Text