BINDVIEW® Insight at Work

Evaluation Guide

bv-Control® for Windows®

Policy Compliance | Vulnerability Management | Directory Administration & Migration

bv-Control®
for Windows® v8.00

Evaluation Guide

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TRADEMARK NOTES

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Introduction

Securing and managing the Windows® environment is an ongoing process, not a point-in-time process. With bv-Control® for Windows®, administrators can audit and analyze data, notify and alert when issues are discovered, and quickly and easily remediate issues to keep their Windows environment maintained, secure, and available.

bv-Control for Windows focuses on automating the task of collecting and presenting information about the Windows environment in the areas of account and configuration management, content and capacity management, and performance. Using bv-Control for Windows, administrators are able to:

- Reduce security exposure – Quickly audit and analyze the security of the Windows environment to identify security breaches and policy non-compliance. Using the account and configuration management features, administrators can identify and remove stale or unused accounts, determine who has excessive rights, assess share permissions, audit computers to ensure that only approved services are installed and properly configured, and perform detailed auditing and forensic analysis.
- Deliver fast security remediation – Streamline and speed up the process of fixing security and administration problems with the closed-loop problem identification and resolution capability. Many problems can be fixed from within the numerous out-of-the-box or customized reports, thereby achieving security policy enforcement and eliminating security risk.
- Automate administrative tasks – Simplify and accelerate daily tasks, such as monitoring systems for installed hotfixes and service packs, managing disk space utilization, and analyzing files to identify changes to Web content, virtual directories, files and permissions.
- Meet service level agreements (SLAs) – Ensure system availability and adequate service levels. The IntelliPACS feature provides real-time monitoring and alerts, which empowers administrators to be proactive by highlighting past trends to determine potential trouble spots and avoid future pitfalls.
- Reduce business disruption and losses – With the combination of security and administration capabilities, organizations can reduce business losses due to downtime by 30-70%, and reduce remediation, recovery time and associated costs by 20-50%.

About This Guide

This bv-Control for Windows Evaluation Guide is designed to guide you through an evaluation process that demonstrates key features of this product. After installing and configuring bv-Control for Windows, you can proceed through the scenarios that are intended to give you a brief, hands-on tour of specific functionality highlights.

Account Management and Analysis

A key area of system and security assessment is user account management. This includes ensuring that only users with valid identities have enabled accounts and that these accounts are properly provisioned. Two examples of how BindView addresses these issues are: locating stale or unused machine accounts, and analyzing detailed rights and group membership.

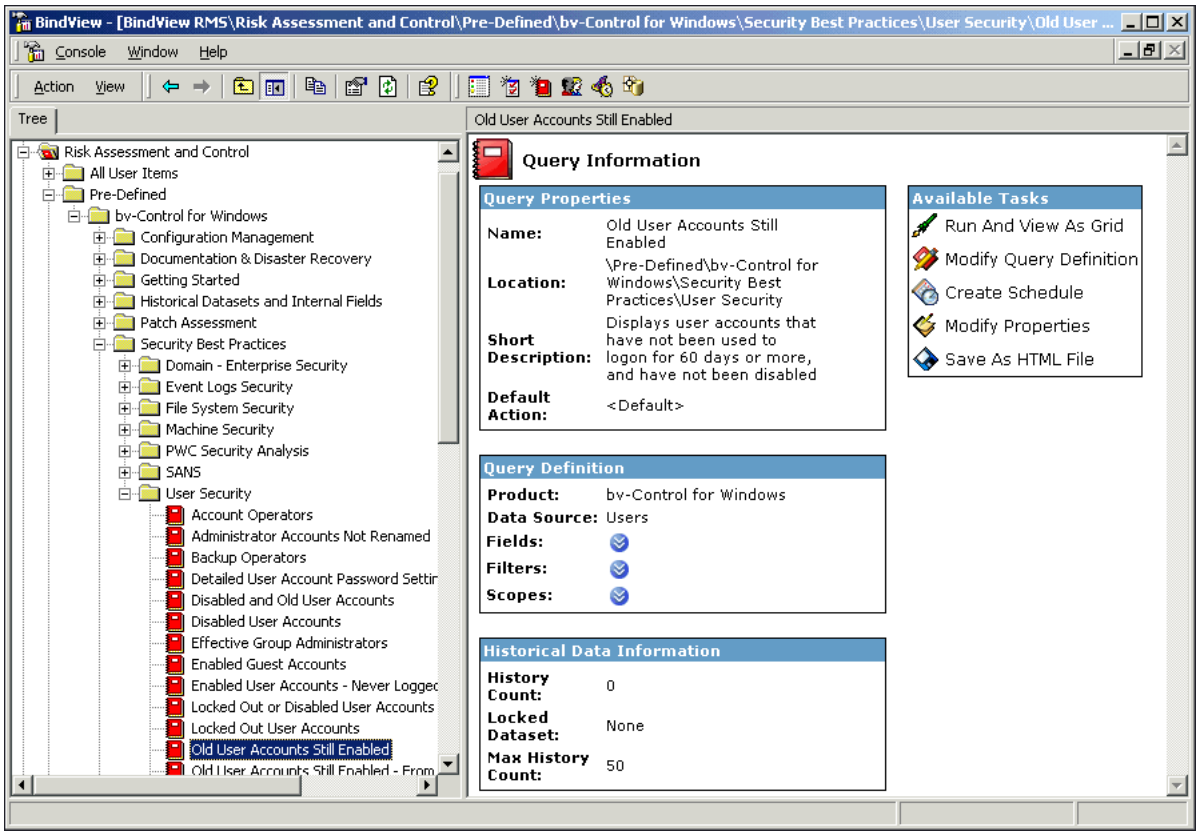
Note: These scenarios are given using only one Query Engine. If you scope to a domain with a large number of users, performance may be affected.

Scenario 1: Stale or Unused Machine Accounts

Organizations face constant change which places a significant burden on vulnerability management of the IT infrastructure. This includes adding, disabling, and deleting user accounts as employees or consultants are recruited and when they leave the organization. Although manually reviewing local computer and domain user accounts is a daunting task, it is vital that in this process you ensure that only accounts with valid identities are active in the environment. BindView not only allows administrators to automate this process, but also provides the ability to take direct action to disable or delete unused accounts. This exclusive closed-loop problem identification and remediation process can save a significant amount of time and effort.

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** and **bv-Control for Windows** folders.
2. Expand the **Security Best Practices** folder.
3. Double-click the **User Security** folder.
4. Double-click **Old User Accounts Still Enabled**.

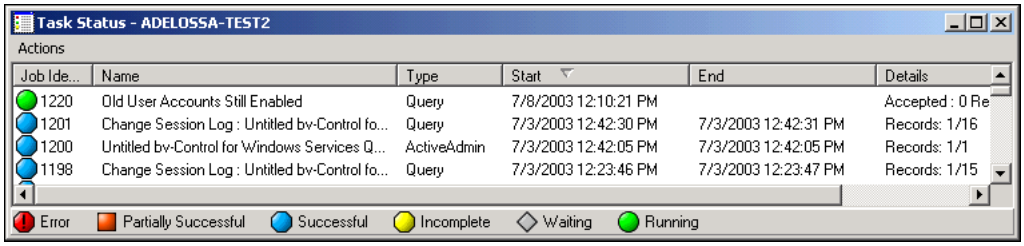
5 In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



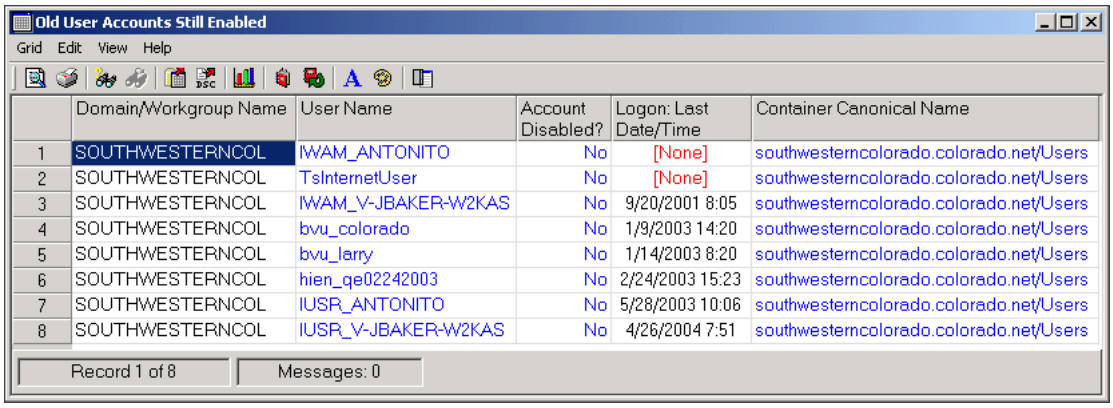
This query allows you to see domain/workgroup name, user name, which users have or do not have disabled accounts, the date and time of last logon, as well as the container name in canonical format.

The results of this query can provide valuable information when trying to determine an accurate user count, or whether or not it is possible that a particular user accessed a sensitive file or directory at a given point in time.

Once you initiate the query, the **Task Status** dialog appears. This dialog shows the status of the query while it is being run.



When the query is done generating, the dataset appears with the related fields included in the grid.



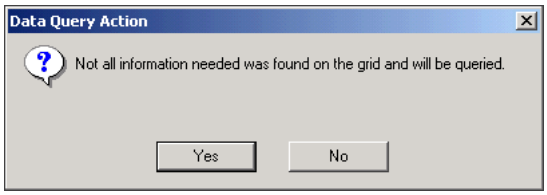
The grid displays all of the fields that are included in this particular pre-defined query. You can see that some column fields are blue. The blue fields on the grid are ActiveAdmin® fields. You can make changes to the contents of these fields by right-clicking on the value in the grid and editing it. The ActiveAdmin editor for the selected field is displayed so that you can make your changes.

To demonstrate this, we will attempt to move a machine account to an OU with no privileges that in turn will prevent the account from being used.

6 Right-click on one of the blue cells in the **Container Canonical Name** column.

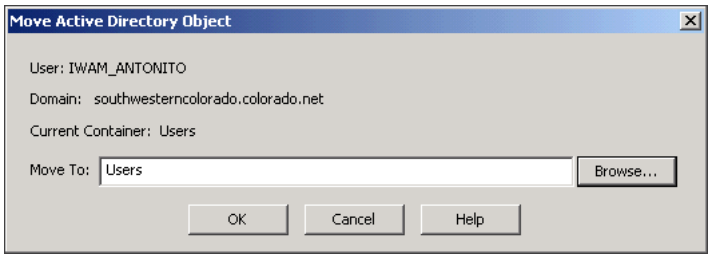
7 Select **Edit** from the drop-down menu.

The **Data Query Action** dialog appears.



8 Click **Yes**.

The ActiveAdmin editor **Move Active Directory Object** dialog appears.

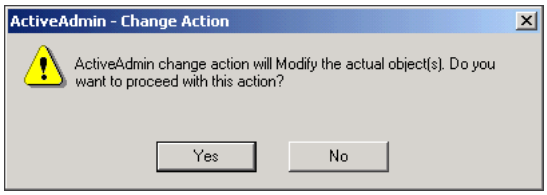


Use this dialog to move a computer or user object to another container in the same domain. account.

9 Enter the complete path of the destination container in the **Move To:** field or click **Browse...** to browse for the destination container.

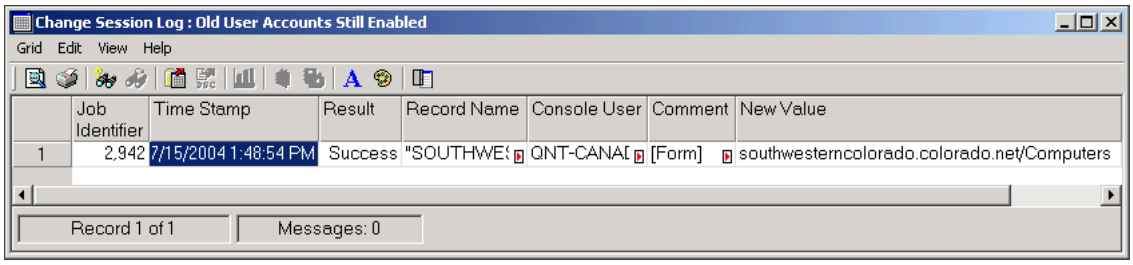
10 Click **OK**.

The **ActiveAdmin - Change Action** dialog appears.



11 Click **Yes** to proceed with the action.

The query will rerun and the Change Session Log will appear with the new value displayed in the grid.



Now that the machine account has been moved, you should determine whether or not the this account will be needed over the next couple of months. You can simply run the **Stale Users** pre-defined query located in the **Configuration Management** folder. This query will return all user accounts in the OU that are older than the time period allotted. You can then delete those accounts.

Scenario 2: Audit User Privileges

Rapid change in organizations creates a significant vulnerability management burden to ensure that users have the appropriate rights to applications, files, directories, and other assets. This includes not only reviewing what accounts have been given explicit access to assets, but what the effective access is to the assets. In this area, BindView provides the ability to thoroughly audit both direct and effective permissions and group membership.

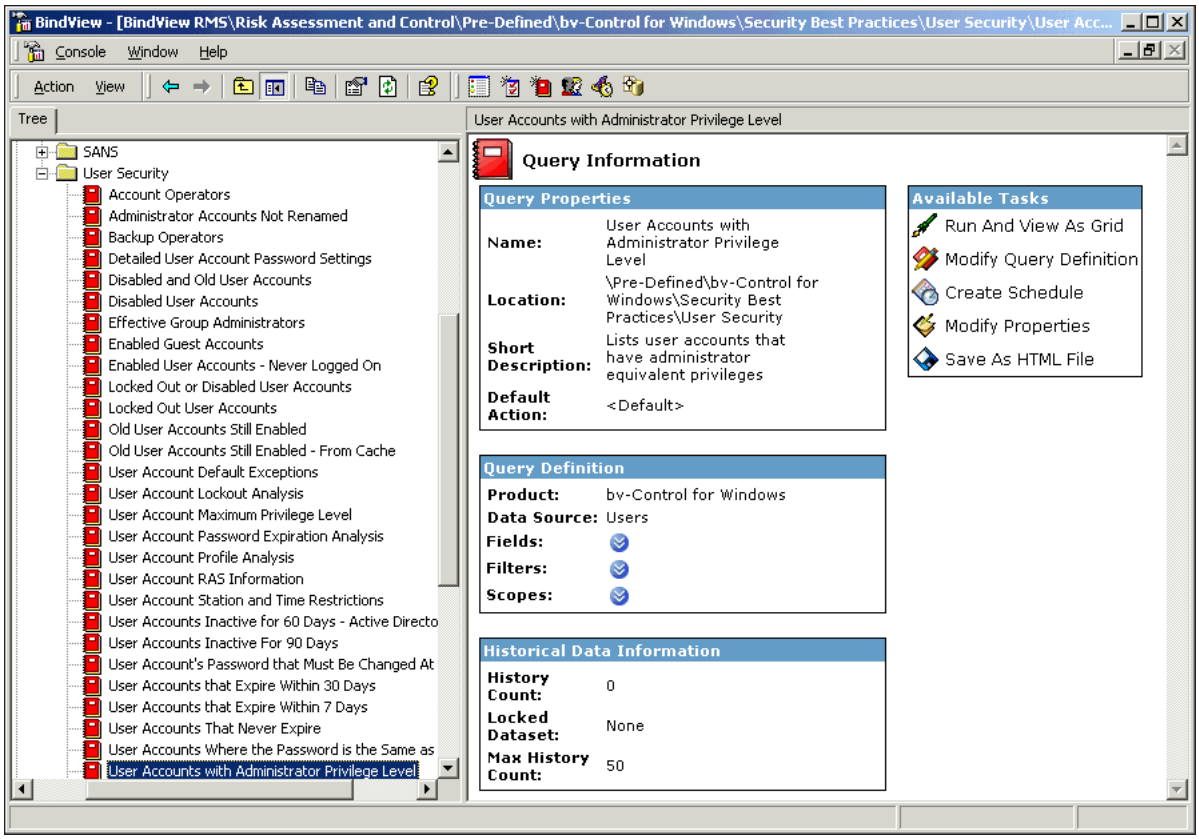
1 From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.

2 Expand the **Security Best Practices** folder.

3 Double-click the **User Security** folder in the tree pane.

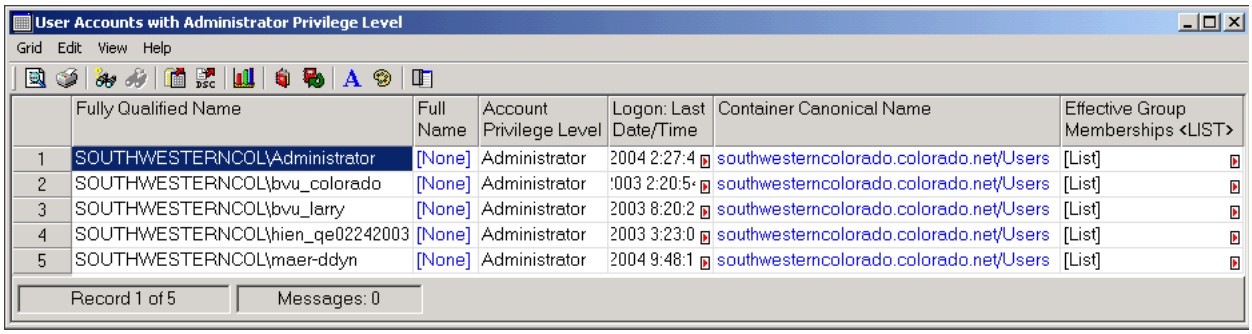
4 Double-click **User Accounts with Administrator Privilege Level** to run the query.

5 In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



This report is a crucial piece of information when assessing the security status of a network, ensuring that only those users with the proper authorization have the appropriate privileges.

The dataset appears with the full name, privilege level, last logon date and time, container name, and the effective group membership list for each account.



In addition to fields that are included in this query, you may also want to select other User Right fields to add to your queries. User Rights fields show whether or not the user has been granted a specific right. These fields also allow the user to determine which machine to analyze for the user right. Some of the user rights are: restoring files and directories, shutting down the system, synchronizing directory service data, and taking ownership of files or other objects.

Other fields of interest include the File and Directory Effective Permissions fields. These fields return the effective permissions that a user has to a specified file or directory while the user

is logged on locally or through Terminal Services, or accessing the object through a network share.

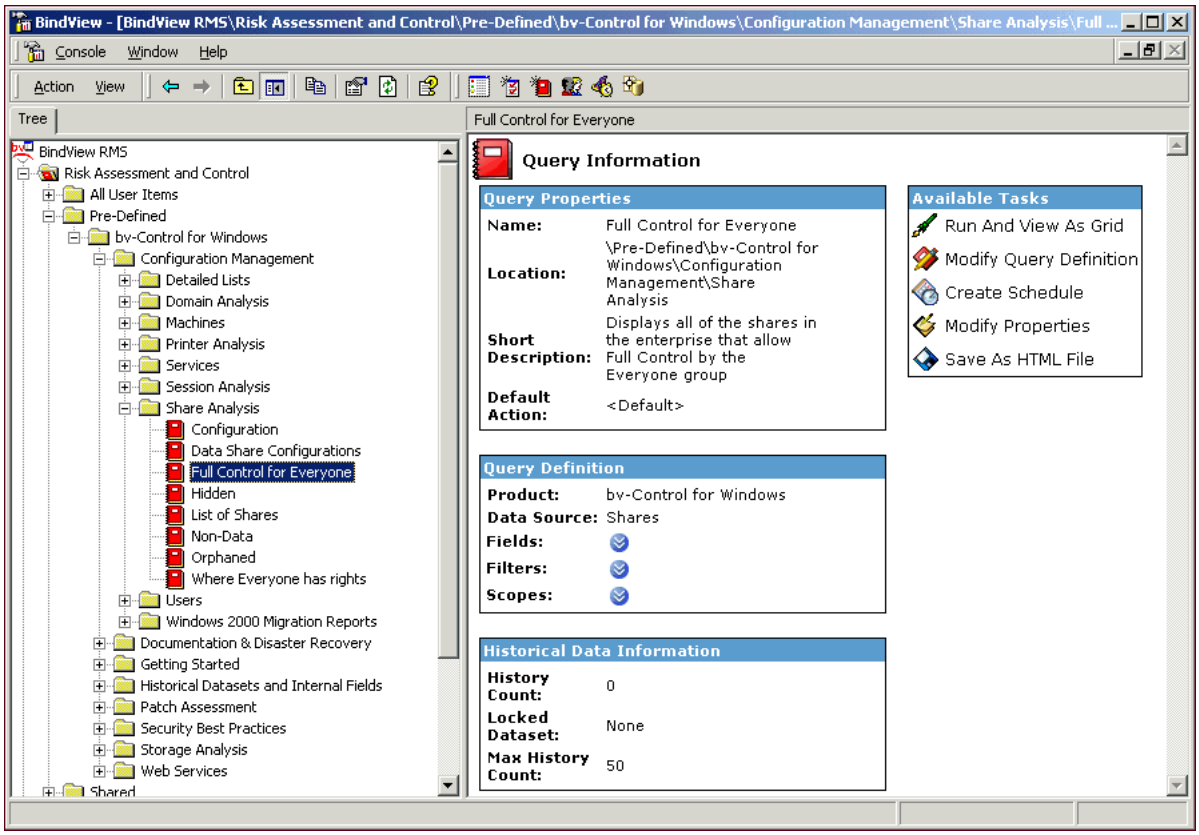
Configuration Management

A significant portion of vulnerability management activities are related to ensuring security best practices through configuration management of servers and workstations. This includes not only the basic OS and patch level review, but also the assessment of file share permissions, service configuration, and event logs. BindView enables administrators to efficiently assess and secure these and many other configuration management concerns.

Scenario 3: Share Configuration

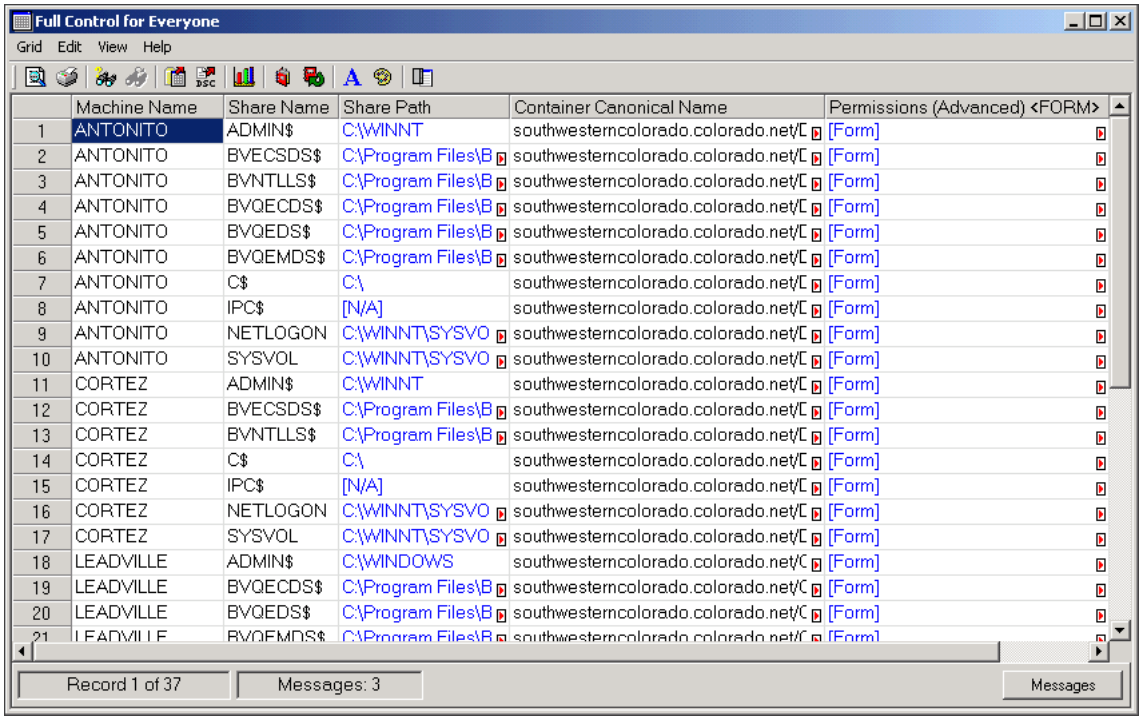
Assessment of share configuration for servers and workstations is vital to ensure the availability of the server, the security of information within the share and security of the enterprise in general. For administrators to assess shares for servers manually would be a cumbersome and expensive task. For administrators to assess shares for workstations would be a nearly impossible task. BindView allows administrators to quickly and efficiently assess share permissions across even the largest enterprises and where necessary disable the share or alter the assigned permissions.

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Windows** folder.
3. Expand the **Configuration Management** folder.
4. Double-click the **Share Analysis** folder.
5. Double-click **Full Control for Everyone**.
6. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



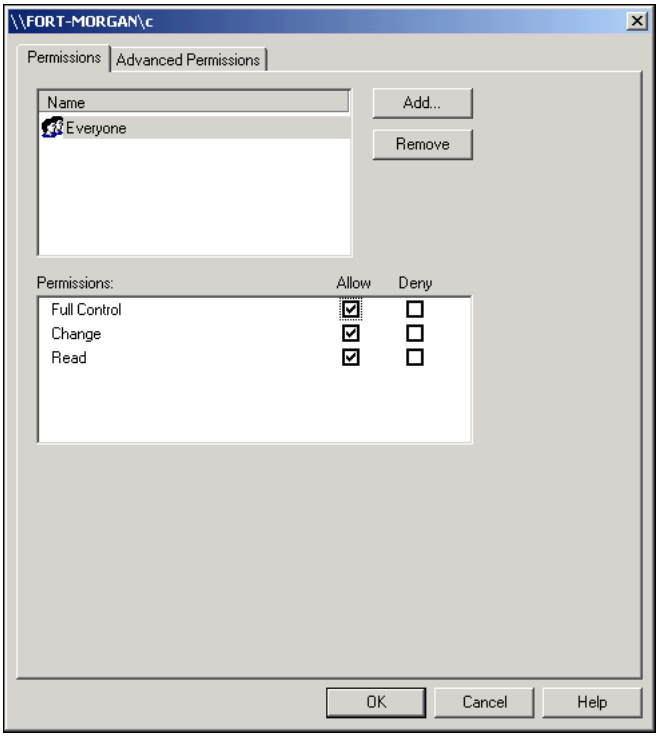
The result set displayed by the query can quickly identify which machines have shares, which domain or workgroup they are a part of, and what permissions are set for those shares. This information is necessary to know in order to maintain the proper share security within the enterprise.

The dataset appears with the Domain/Workgroup Name, Machine Name, Share Name, Share Path, Container Canonical Name, and Advanced Permissions fields displayed.

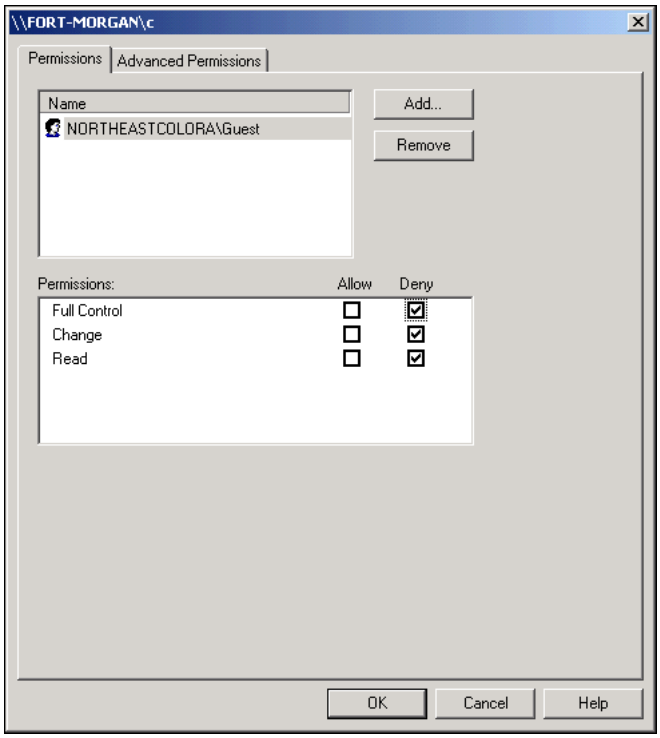


Use BindView's ActiveAdmin feature to make the share more secure by editing the permissions for the share.

1. Right-click on a field in the **Permissions Advanced <FORM>** column.
2. Select **Edit** from the drop-down menu. The ActiveAdmin Editor appears.



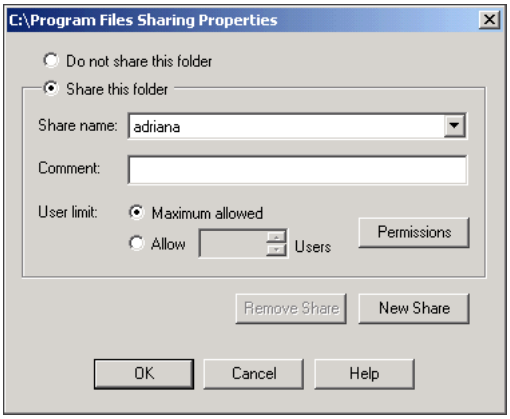
You can use the ActiveAdmin dialog to change permissions for the share by choosing to deny specific permissions. For example, you can take away full control of the share, deny change rights, as well as deny read rights. You can even remove permissions from Everyone and add a specific user.



In addition, you can use ActiveAdmin to edit the **Share Path**.

1 Right-click on a field in the **Share Path** column of the grid.

2 Select **Edit** from the drop-down menu. The ActiveAdmin editor dialog appears.

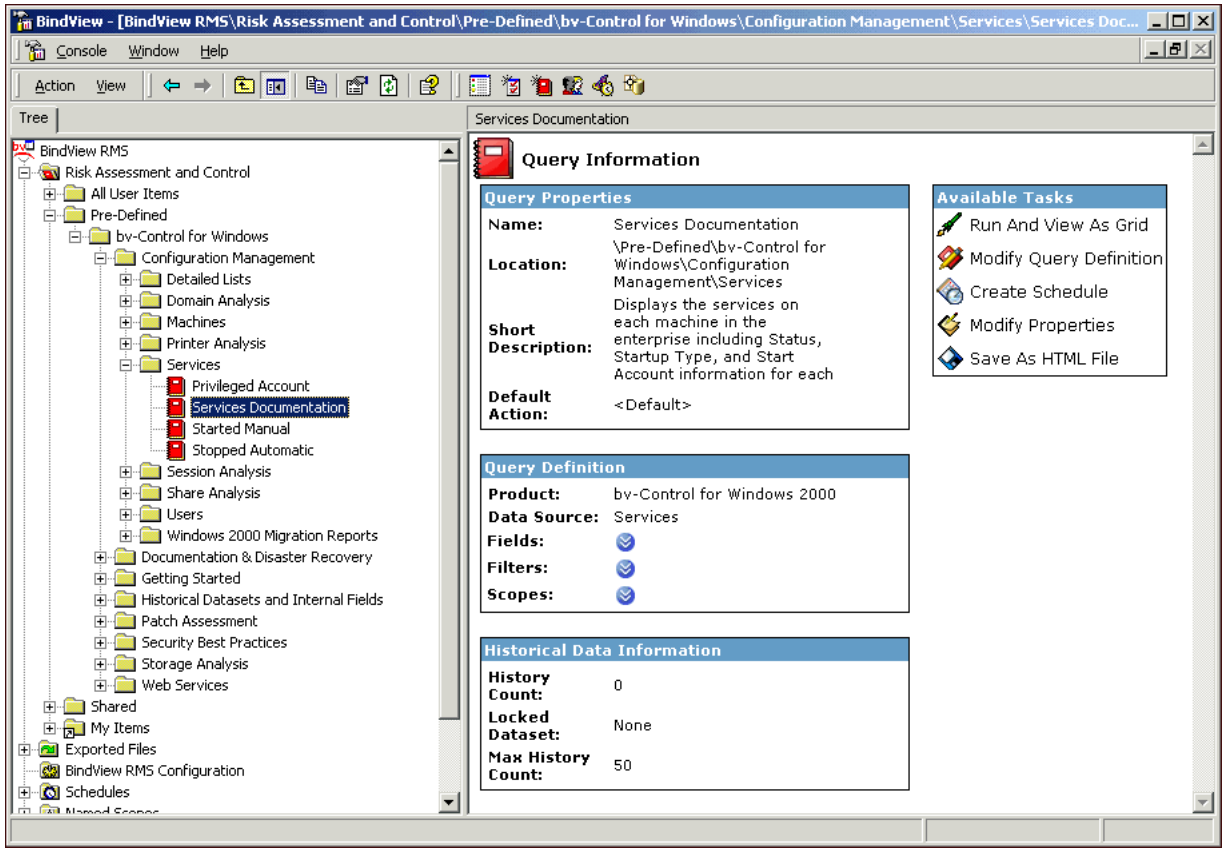


This dialog is similar to the Native Windows dialog. Use this dialog to disable, add a new share, or alter the permissions.

Scenario 4: Service Configuration

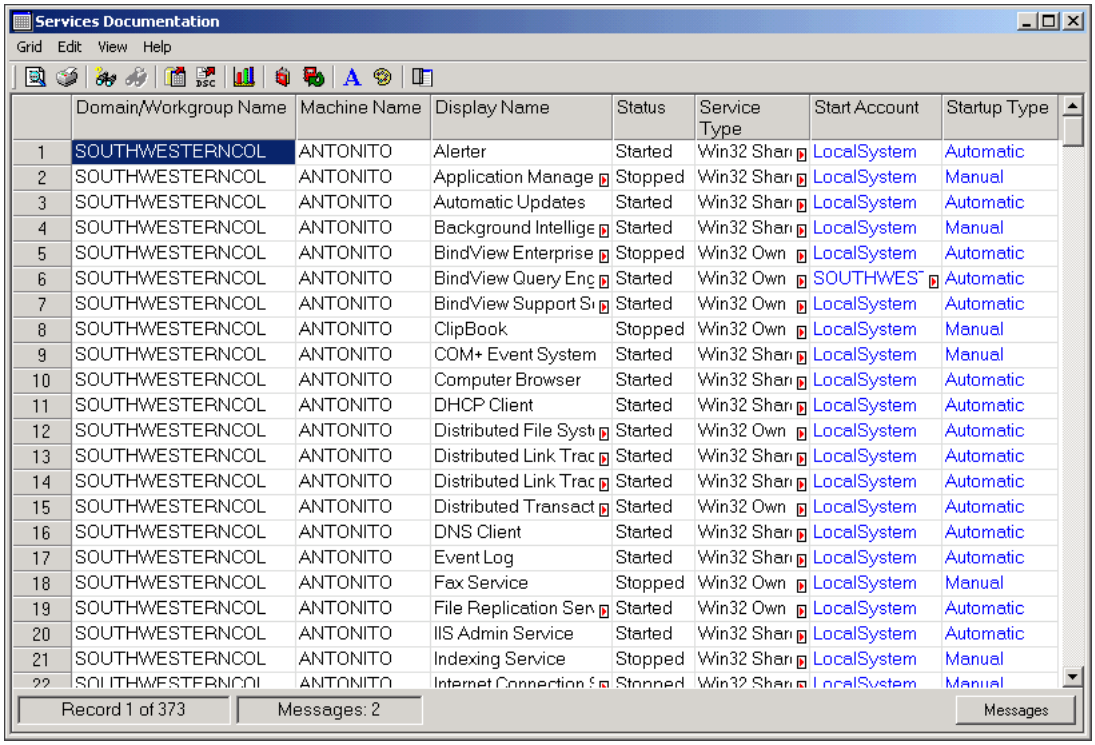
Auditing computers to ensure that only approved services are installed and are properly configured is a critical component of vulnerability management. For instance, how do you review your enterprise to locate unapproved installations of IIS? When these rogue instances are found how do you remediate the violation? Another example is related to the significant investment that organizations maintain in virus software. How do you ensure that this software is installed and running? BindView not only enables administrators to assess their environment for service configuration, but it also allows administrators to operatively remediate violations.

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **Configuration Management** folder.
3. Expand the **Services** folder.
4. Double-click **Services Documentation**.
5. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



The dataset appears with the Services information displayed. The information in the grid tells you the internal type of the service process (Service Type), the name of the user account used by the service process to logon to the system (Startup Account), the method by which the service is started (Startup Type), as well as machine name, display name, and the status.

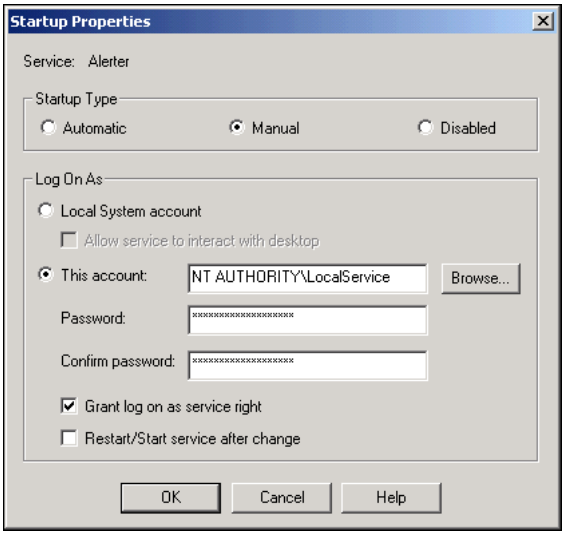
This information will help you identify if the Service is authorized and can tell you the startup account and its owner.



You can modify the scope of this query to include a particular domain or organizational unit (OU). If you choose to scope to an OU, you can add the Container Canonical Name field to display the container in canonical name format.

If the services reported do not match policies or best practices used by your organization, you can use the **ActiveAdmin** feature to make changes. You can make changes to the contents of these fields by right-clicking on the value in the grid and editing it. For example, you can change how the service starts, how the service logs on to machines and the permissions it has, and whether the service will be able to make changes to the current Windows desktop environment.

1. Right-click on a blue field in the grid. A drop-down menu appears.
2. Select **Edit** from the drop-down menu. The **Startup Properties** dialog appears. The **Startup Properties** dialog is an ActiveAdmin editing dialog that allows you to change the value associated with the selected field. Use the Startup Properties dialog to change the startup properties of the service that is running. You can change the name of the selected service, choose how the selected service starts up, and control how the selected service starts up.



3 Make your changes and click **OK** to close the dialog.

4 You will be prompted to verify that you want to proceed with the change to the object attribute. Click **OK** to close the dialog.

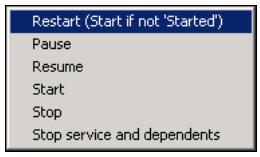
The **Change Session Log** will appear with the change you made displayed in the grid.

For certain fields, you can also make changes to the item without using an ActiveAdmin editor. These changes affect entire classes of items rather than properties of those items. In terms of the grid, they affect a row rather than a column. For example, you can start and stop, pause, resume and restart services, as well as delete home directories. These changes are called **ActiveAdmin Record Operations**. To make ActiveAdmin Record Operations changes, right-click any ActiveAdmin field, or on any row containing an ActiveAdmin field and choose the **Row** item that appears on the context menu. A submenu appears with the relevant ActiveAdmin operations. Choose the action you want to take from the menu and the action happens immediately.

1 From the grid, right-click on an item.

2 Select **Row** and **ActiveAdmin** from the drop-down menu.

The **ActiveAdmin** menu displays.



3 Choose a record operation from the menu.

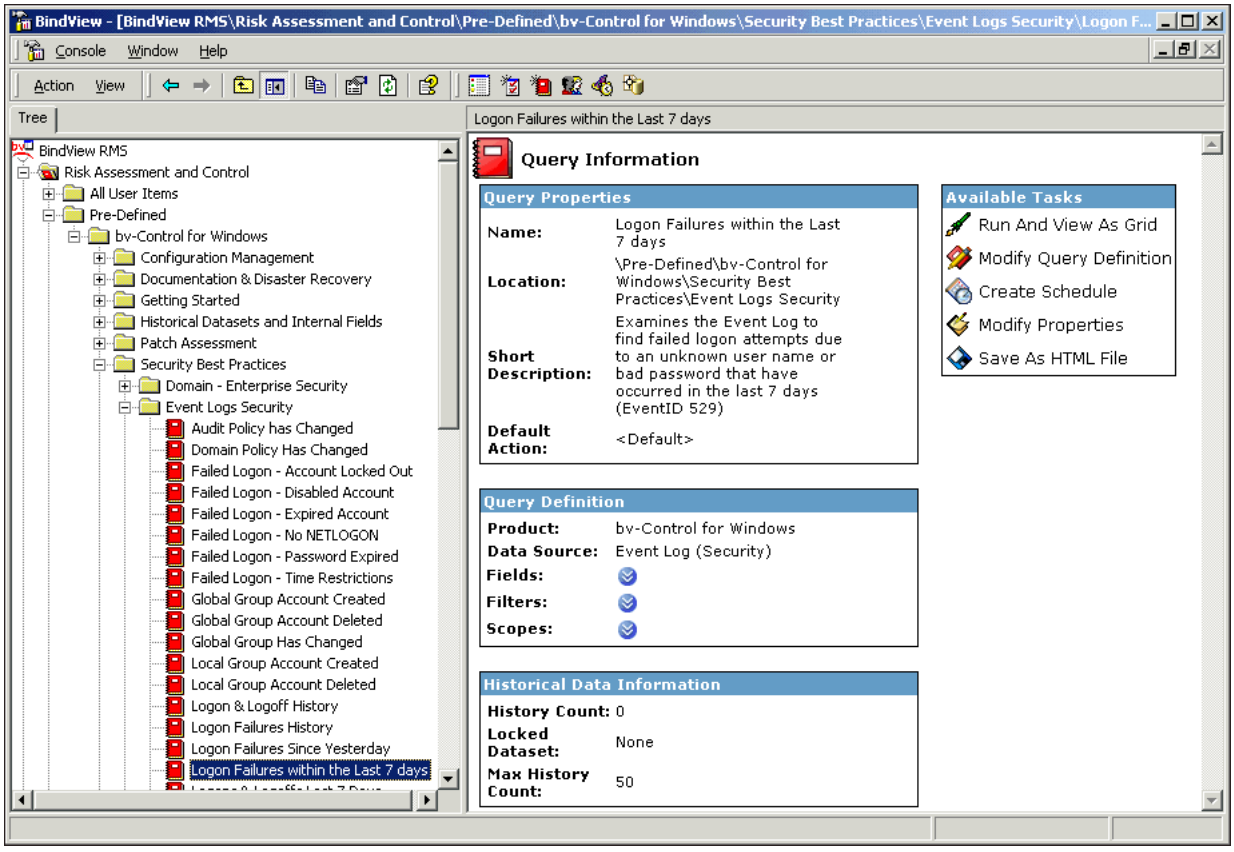
4 Verify your change by clicking **OK** on the **Change Action** dialog. The **Change Session Log** will appear with the change displayed in the grid.

Scenario 5: Flexible Registry and Event Log Reporting

Although there are general best practices, each IT enterprise exists to meet the business needs of the organization. As a result, each IT environment will have special cases whether it is proprietary software, a specific distribution of servers and server roles, and/or any number of other factors that make the environment unique. This creates a need for administrators to go beyond prepackaged queries and create queries that answer the questions relevant to their organization. The BindView bv-Control products offer unmatched flexibility in customizing queries. Two significant examples are the registry and event log reporting capabilities of the product.

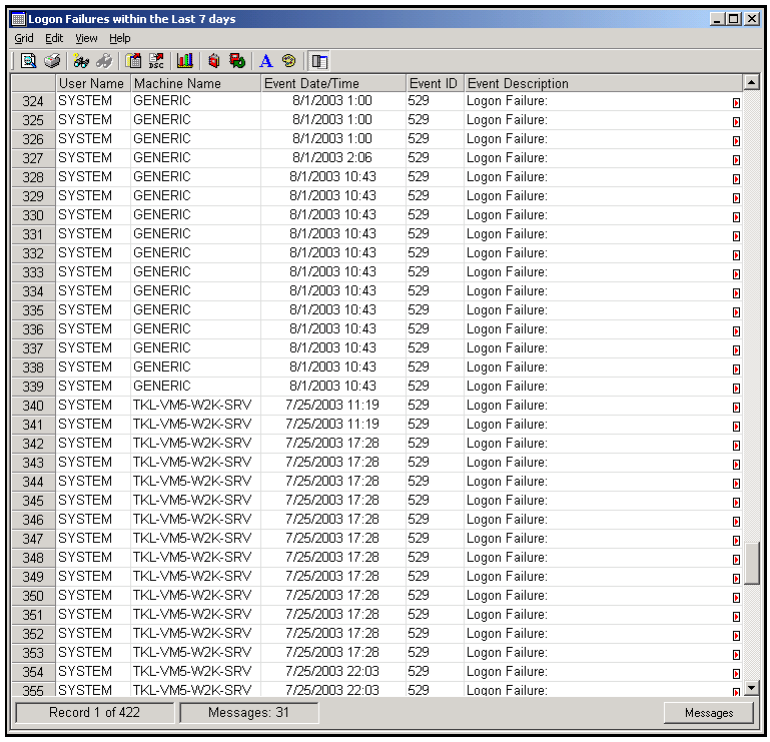
1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Windows** folder.
3. Expand the **Security Best Practices** folder.
4. Expand the **Event Logs Security** folder.

   The **Event Logs Security** folder contains several reports that will help you analyze application, security, and system log entries on your Windows servers and workstations.
5. Double-click the **Logon Failures within the last 7 days**.
6. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



The dataset appears with the name of the user account that caused the event, the machine name of the computer on which the event occurred, the time and date the event occurred, the event's numeric code (this code is defined by the process that generated the event), and a detailed description of what caused the event.

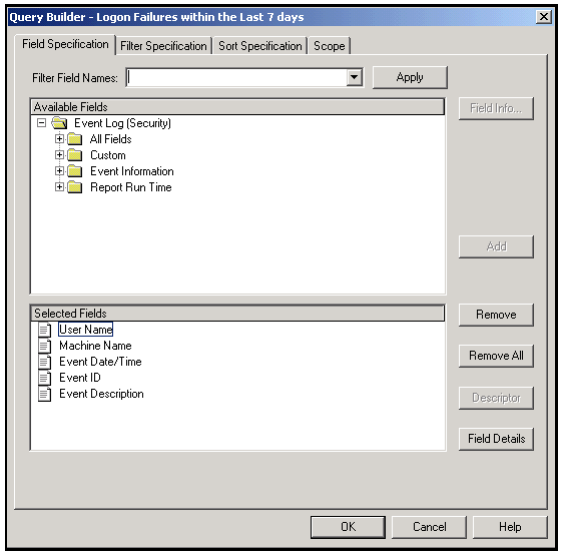
This query can be especially useful for forensic purposes, when a security event has occurred. The data extracted is presented in a way that gives the user information that can help determine the root cause of the issue and the identity of the machine. Thus, the query helps assist in identifying if the issue has been caused by accident or malice.



	User Name	Machine Name	Event Date/Time	Event ID	Event Description
324	SYSTEM	GENERIC	8/1/2003 1:00	529	Logon Failure:
325	SYSTEM	GENERIC	8/1/2003 1:00	529	Logon Failure:
326	SYSTEM	GENERIC	8/1/2003 1:00	529	Logon Failure:
327	SYSTEM	GENERIC	8/1/2003 2:06	529	Logon Failure:
328	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
329	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
330	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
331	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
332	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
333	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
334	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
335	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
336	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
337	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
338	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
339	SYSTEM	GENERIC	8/1/2003 10:43	529	Logon Failure:
340	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 11:19	529	Logon Failure:
341	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 11:19	529	Logon Failure:
342	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
343	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
344	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
345	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
346	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
347	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
348	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
349	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
350	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
351	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
352	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
353	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 17:28	529	Logon Failure:
354	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 22:03	529	Logon Failure:
355	SYSTEM	TKL-VM5-W2K-SRV	7/25/2003 22:03	529	Logon Failure:

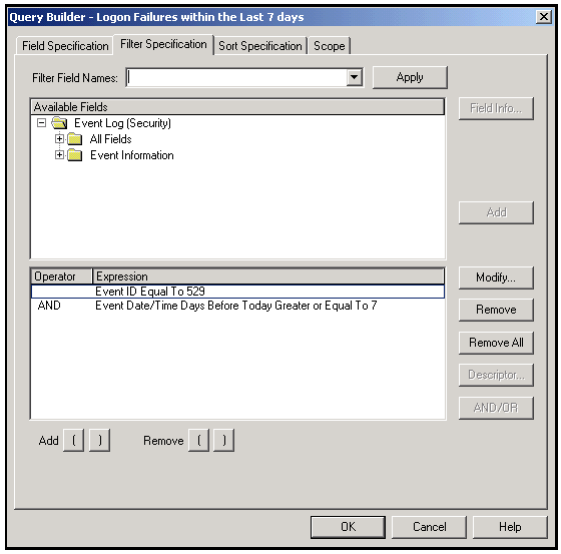
1 Click the **Modify Query** button on the grid toolbar.

2 The **Query Builder** appears with the grid fields in the **Selected Fields** box.



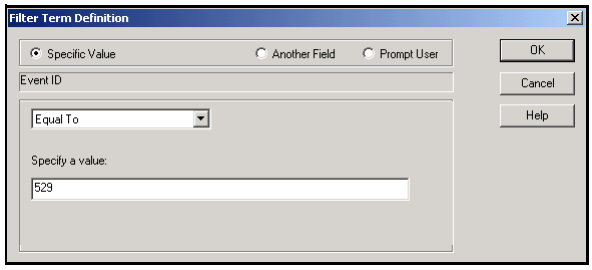
3 On the Query Builder, click the **Filter Specification** tab.

Note the expression at the lower part of the dialog, "Event ID is equal to 529." This is a numeric code that is defined by the process that generates the event.



1 You can modify this expression by double-clicking on the field or selecting the field and clicking the **Modify...** button.

The **Filter Term Definition** dialog appears.



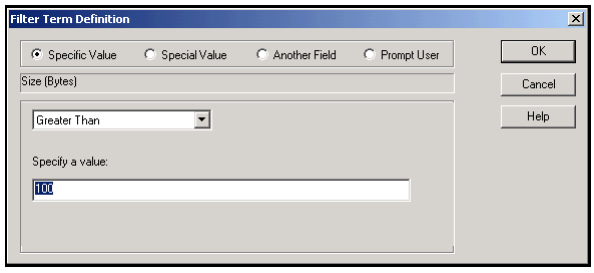
2 Modify the Event ID then specify a value.

3 Click **OK** to close the dialog.

The second half of the previous expression can also be modified.

1 Double-click on the field or click the **Modify...** button.

The **Filter Term Definition** dialog for the expression appears.



2 Modify the Event Date/Time by selecting when you want the event to take place, then specify the value.

3 Click **OK** to close the dialog.

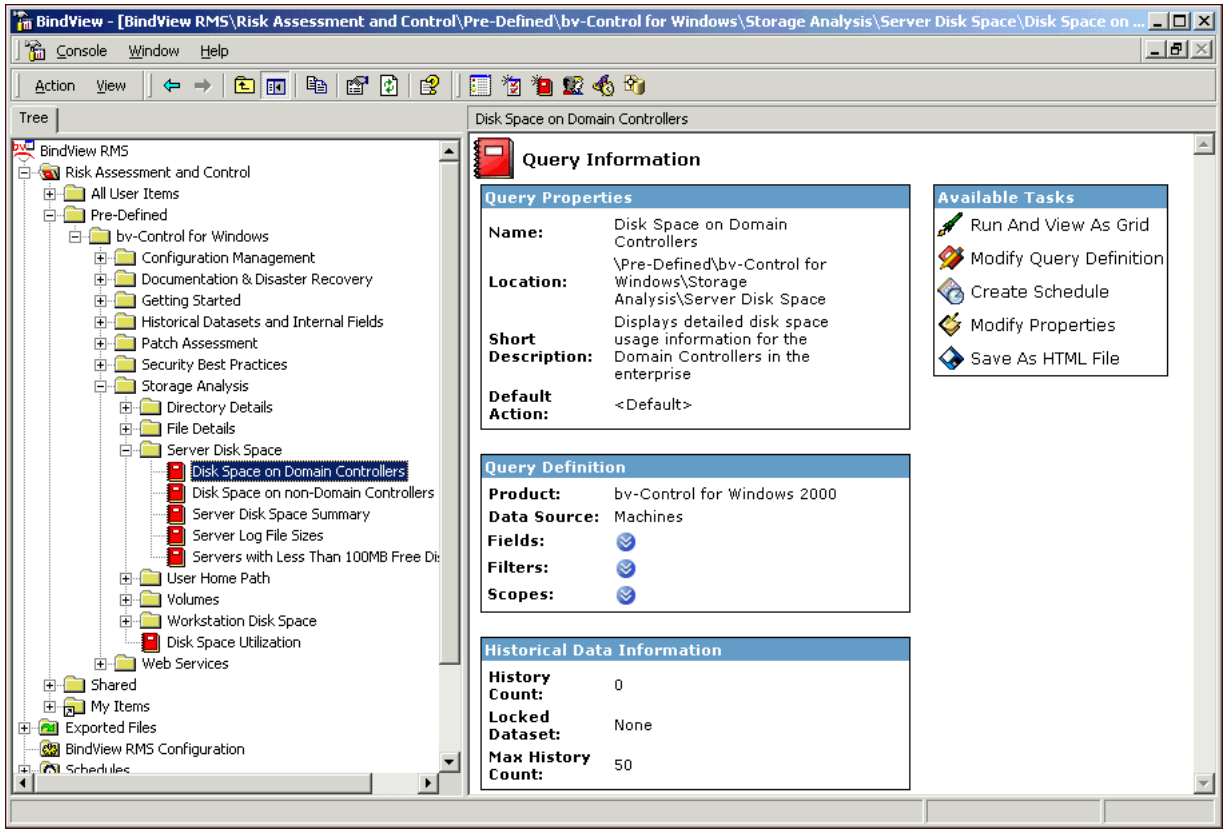
Content and Capacity Management

Another area of concern in rapidly changing IT organizations is assessing capacity. This includes both reviewing available capacity and determining how well the capacity usage fits with the business needs of the organization. BindView provides the administrator with the ability to not only identify these cases, but to directly remediate them.

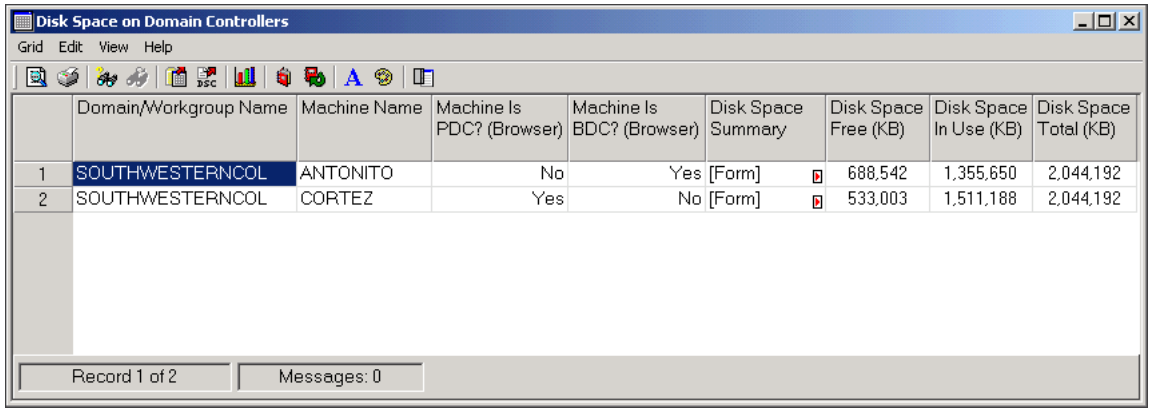
Scenario 6: Disk Space Analysis and Management

Organizations maintain a significant investment in storage space in the form of servers, disarrays or SANs, backup systems, and man-hours. Locating servers that are running low on disk space and/or locating inappropriate or wasteful disk space allows the administrator to reduce the need to add new disk space and can shorten backup cycles.

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Windows** folder.
3. Expand the **Storage Analysis** folder.
4. Double-click the **Server Disk Space** folder.
5. Double-click **Disk Space on Domain Controllers** to run the query.
6. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



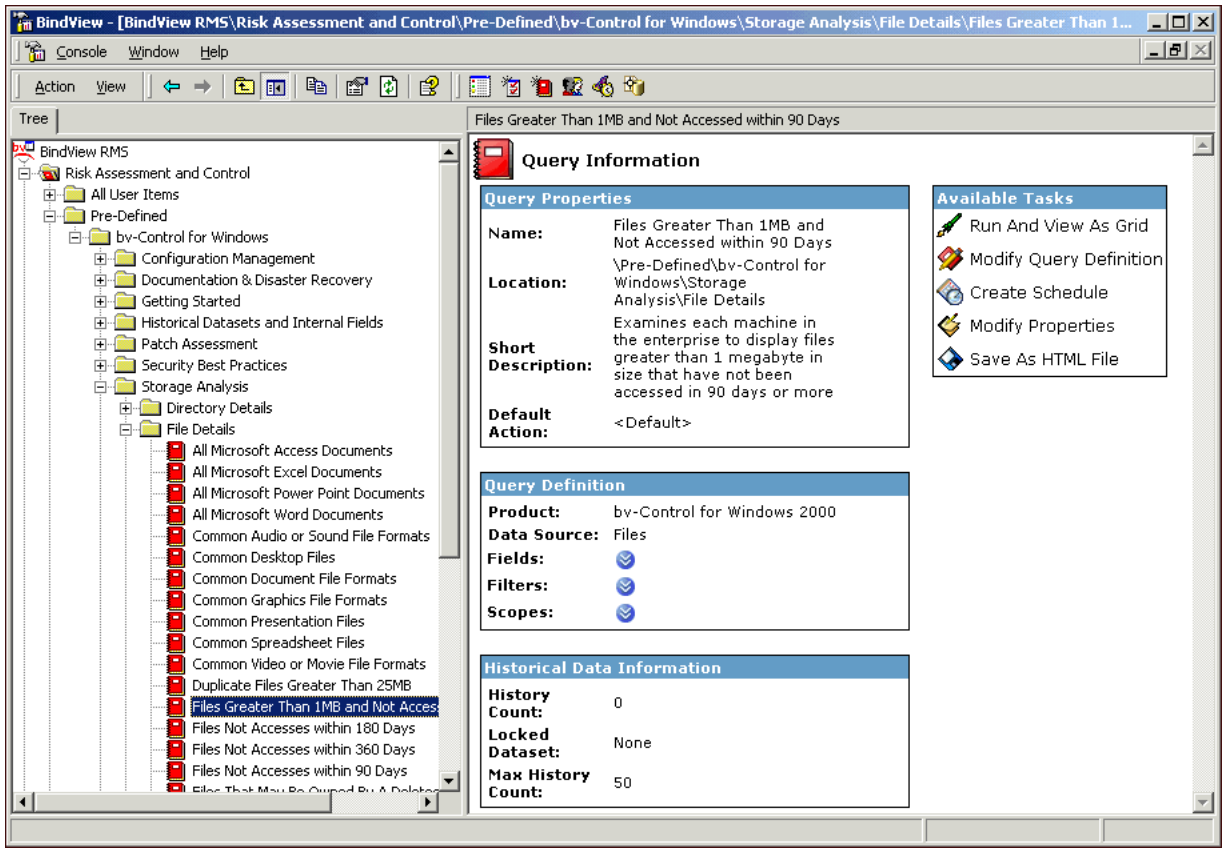
The dataset appears with the disk space summary, free disk space, disk space usage, and disk space totals.



This report is beneficial especially when performing a compliance check concerning the presence of unauthorized filed types. Additionally, this report can be used when performing routine maintenance by determining which files have not been accessed in a certain amount of time.

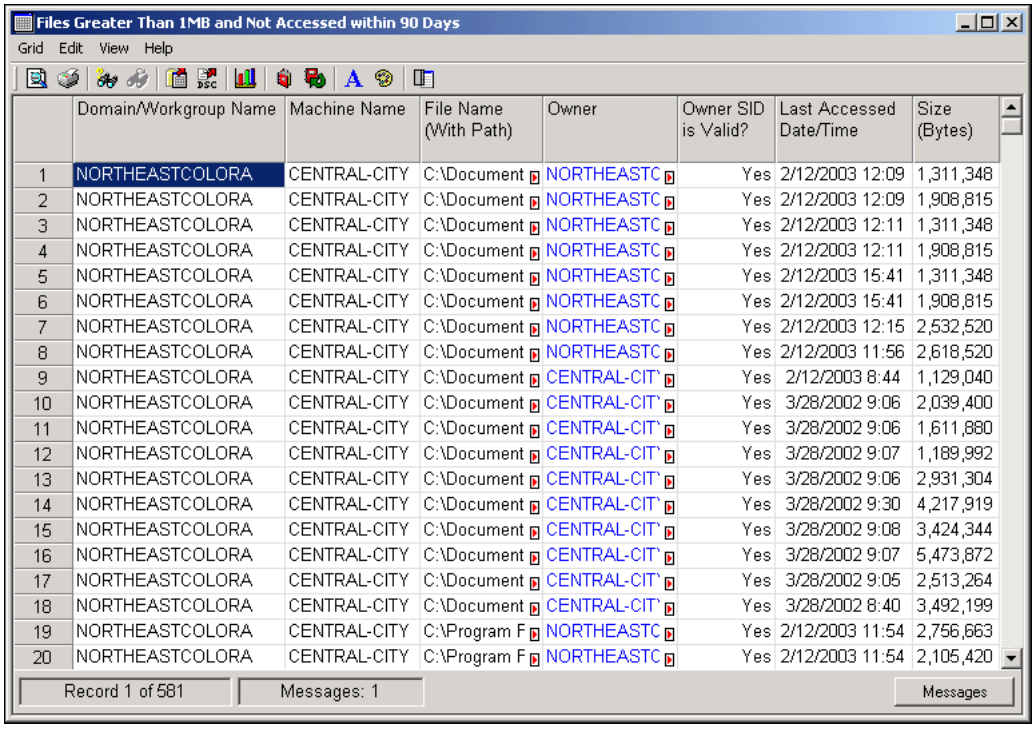
You can also retrieve summary data on **Directories** and **Files**. Reports that specify directory size and amount of files in a directory are available in the **Storage Analysis** folder. In addition, in the same folder there are **File Detail** reports that specify common files, files greater than a specific size, and days since your files were last accessed

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Windows** folder.
3. Expand the **Storage Analysis** folder.
4. Double-click the **File Details** folder.
5. Double-click **Files Greater than 1MB and Not Accessed within 90 Days**.
6. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.



The dataset appears with the domain or workgroup membership of the machine containing the file, the file's parent machine name, the full path name of the file, whether the owner of

the file is a valid account, the date and time the file was last accessed, and the logical size of the file in bytes.



Files Greater Than 1MB and Not Accessed within 90 Days

Grid Edit View Help

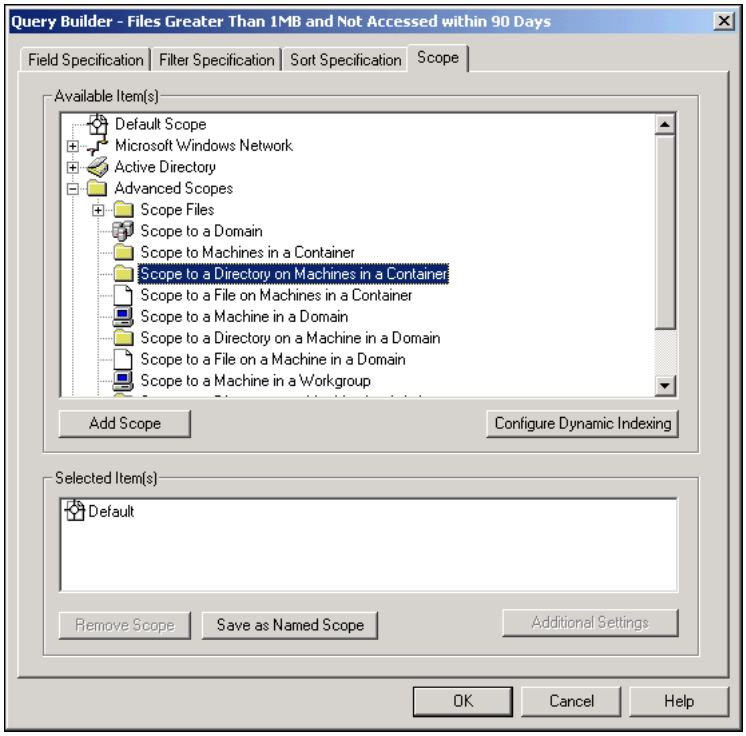
	Domain/Workgroup Name	Machine Name	File Name (With Path)	Owner	Owner SID is Valid?	Last Accessed Date/Time	Size (Bytes)
1	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 12:09	1,311,348
2	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 12:09	1,908,815
3	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 12:11	1,311,348
4	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 12:11	1,908,815
5	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 15:41	1,311,348
6	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 15:41	1,908,815
7	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 12:15	2,532,520
8	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	NORTHEASTC	Yes	2/12/2003 11:56	2,618,520
9	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	2/12/2003 8:44	1,129,040
10	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:06	2,039,400
11	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:06	1,611,880
12	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:07	1,189,992
13	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:06	2,931,304
14	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:30	4,217,919
15	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:08	3,424,344
16	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:07	5,473,872
17	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 9:05	2,513,264
18	NORTHEASTCOLORA	CENTRAL-CITY	C:\Document	CENTRAL-CIT`	Yes	3/28/2002 8:40	3,492,199
19	NORTHEASTCOLORA	CENTRAL-CITY	C:\Program F	NORTHEASTC	Yes	2/12/2003 11:54	2,756,663
20	NORTHEASTCOLORA	CENTRAL-CITY	C:\Program F	NORTHEASTC	Yes	2/12/2003 11:54	2,105,420

Record 1 of 581 | Messages: 1 | Messages

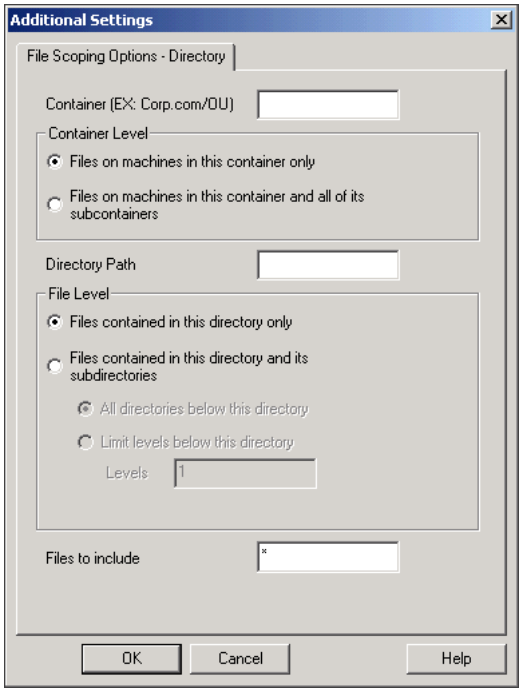
You can modify this query's scope to report on a single directory on all machines in a container.

1. Click the **Modify Query** button on the grid toolbar. The **Query Builder** appears.
2. Click the **Scope Tab**.
3. Expand the **Advanced Scopes** folder.

4 Double-click the **Scope to a Directory on Machines in a Container** folder.



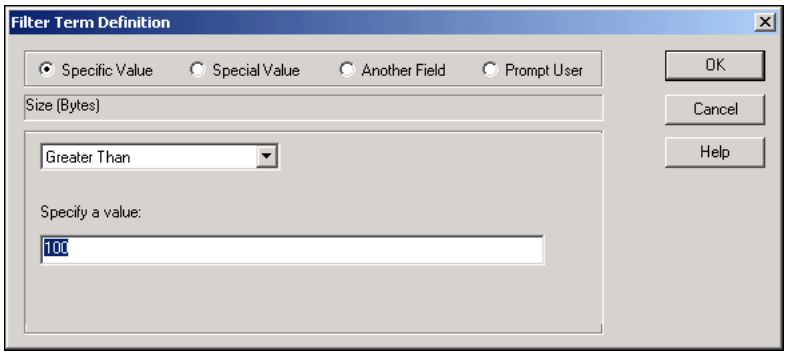
The **File Scoping Options** dialog appears. Use this dialog to limit the scope of the query to files in a specified directory or files on machines in the container.



5 Click **OK**.

6 On the Query Builder, click the **Filter Specification** tab.

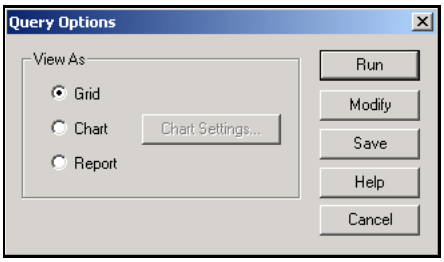
7 Change the filter from 1MB to 100MB by double-clicking the **Size (Bytes) Greater Than 1000000** expression. The **Filter Term Definition** dialog appears.



8 In the **Specify a Value** field type in **100**. Click **OK.**

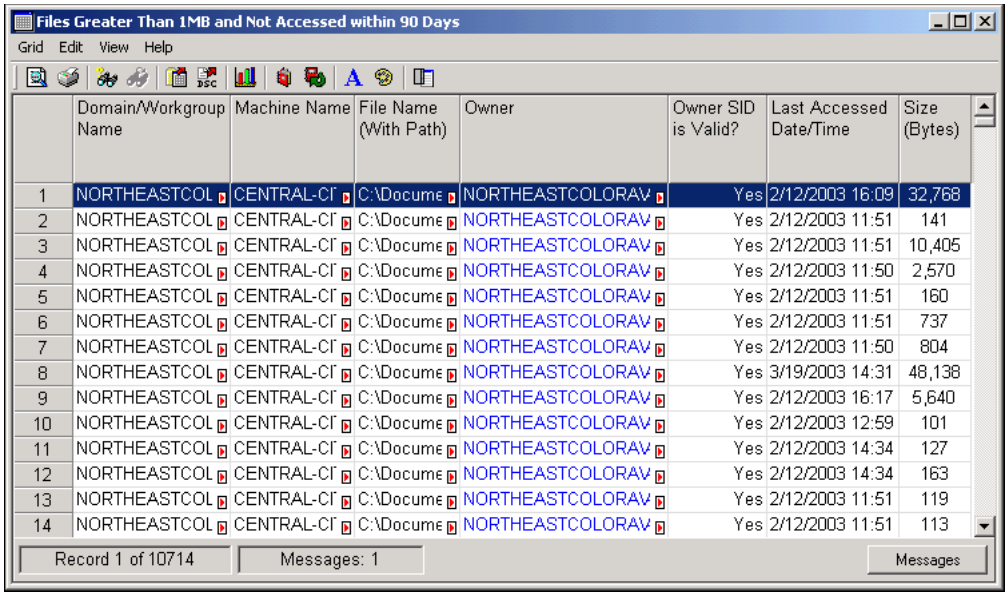
9 Click **OK** to rerun the query.

The **Query Options** dialog appears.



10 Click **Run**.

11 The dataset appears with the updated information displayed.

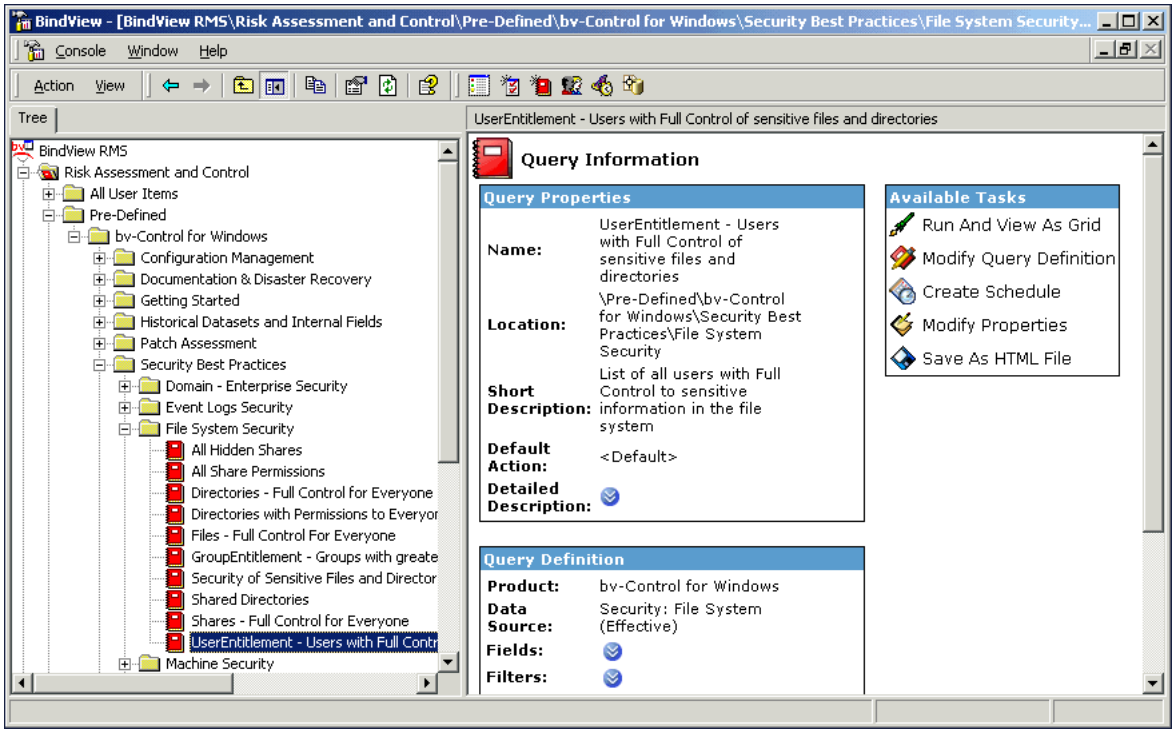


Security of Sensitive Files and Directories

Due to privacy regulations mandated by HIPAA, GLBA, and California SB 1386, it is necessary to audit which users and groups have access to sensitive corporate files and directories, such as human resources files. An audit report of this nature requires expert knowledge of Microsoft Windows and Active Directory security, and can take days or even weeks to complete for a small set of directories. An accurate analysis of this type of entitlement information should take into account whether access is local or through a file share as well as the effective group membership. The bv-Control for Windows product automates this analysis to allow the users to quickly produce an audit report detailing all users and/or groups with effective access to sensitive files and directories, what level of access is granted, and evidence of how it was obtained.

Scenario 7: Audit Users and Groups that Have Access to Sensitive Files and Directories

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Windows** folder.
3. Expand the **Security and Best Practices** folder.
4. Double-click the **File System Security** folder.
5. Double-click **UserEntitlement - Users with Full Control of sensitive files and directories**.
6. In the **Available Tasks** section of the details pane, click **Run And View As Grid**.

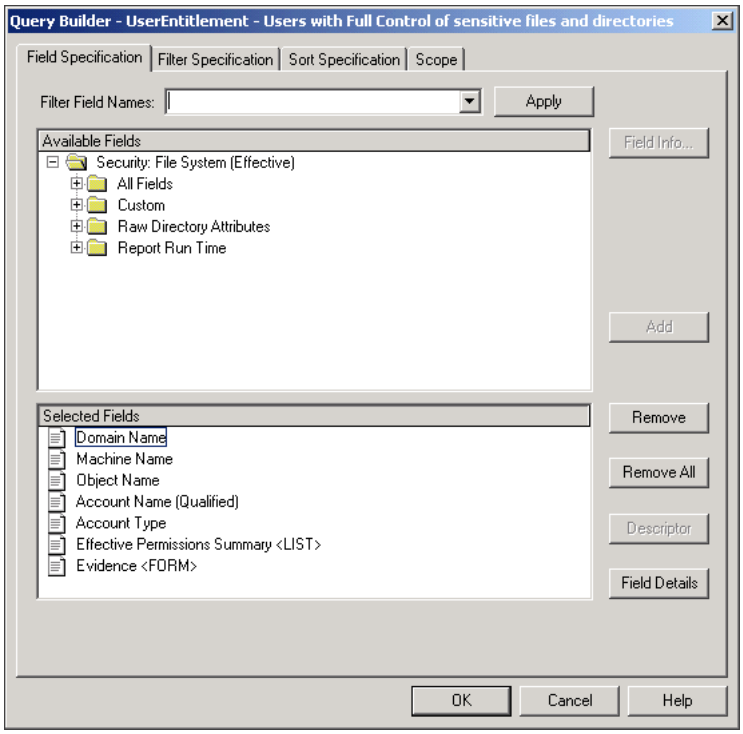


The ability to filter on specific permissions can be particularly useful when there is a need for granularity in determining whether a User or Group has appropriately assigned privileges down to a specific file.

Modify this query to include a specific file or server into the scope. In addition, you will add a filter to the query to add specific levels of access by filtering on any of the permission fields.

7 From the **Available Tasks** section of the details pane, click **Modify Query Definition**.

The **Query Builder** appears.

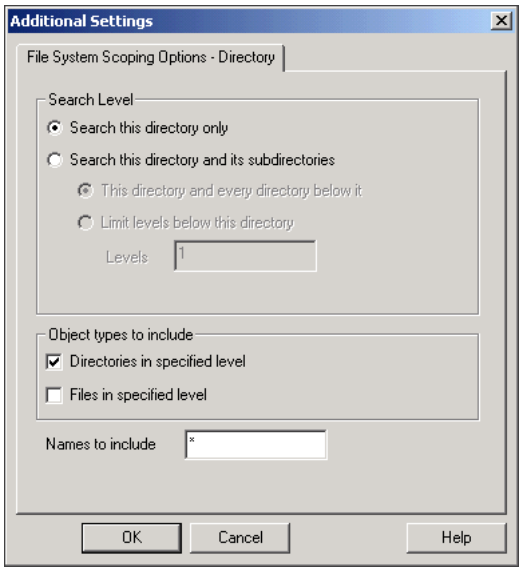


8 Click the **Scope** Tab.

9 Expand the **Active Directory** folder to display files that you want to include into the scope.

10 In this case we will navigate down to the **Documents and Settings** container. Click the **Add Scope** button on the Query Builder.

The **Additional Settings** dialog appears.



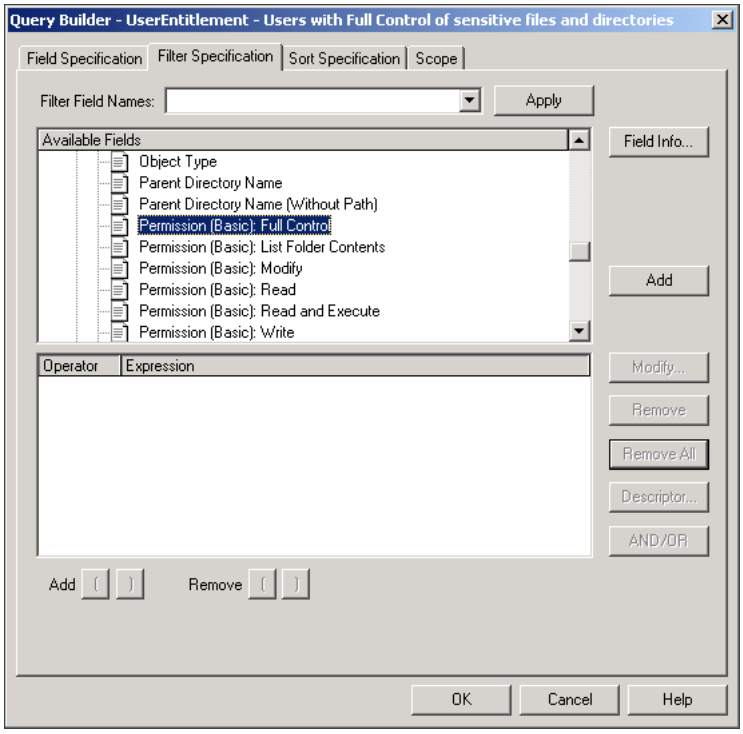
Use this dialog to specify how far down in the file's directory structure that you want to query.

11 Select from the available file scoping options and click **OK** to close the dialog.

12 On the Query Builder, select the **Filter Specification** tab.

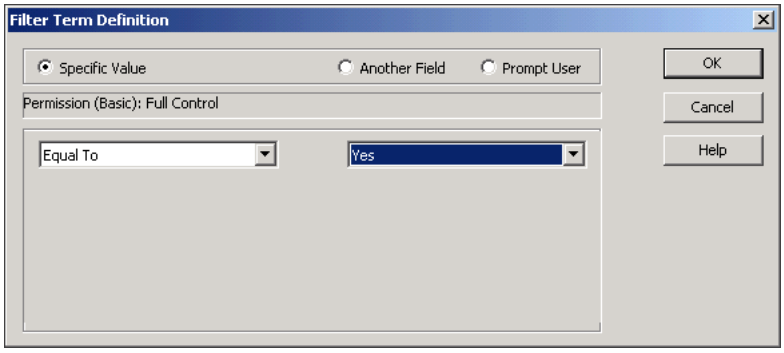
13 Expand the **All Fields** folder.

14 Select the **Permission (Basic) Full Control** field. This field will return all records of users that have full control access of the selected file or directory.



15 Click **Add**.

The **Filter Term Definition** dialog appears.

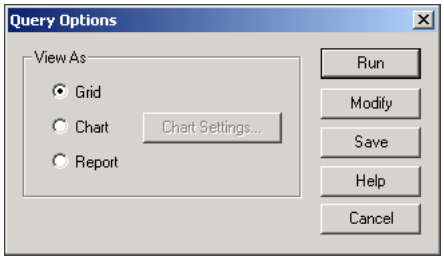


Ensure that **Equal To** and **Yes** are selected in the drop-down lists.

16 Click **OK** to close the dialog.

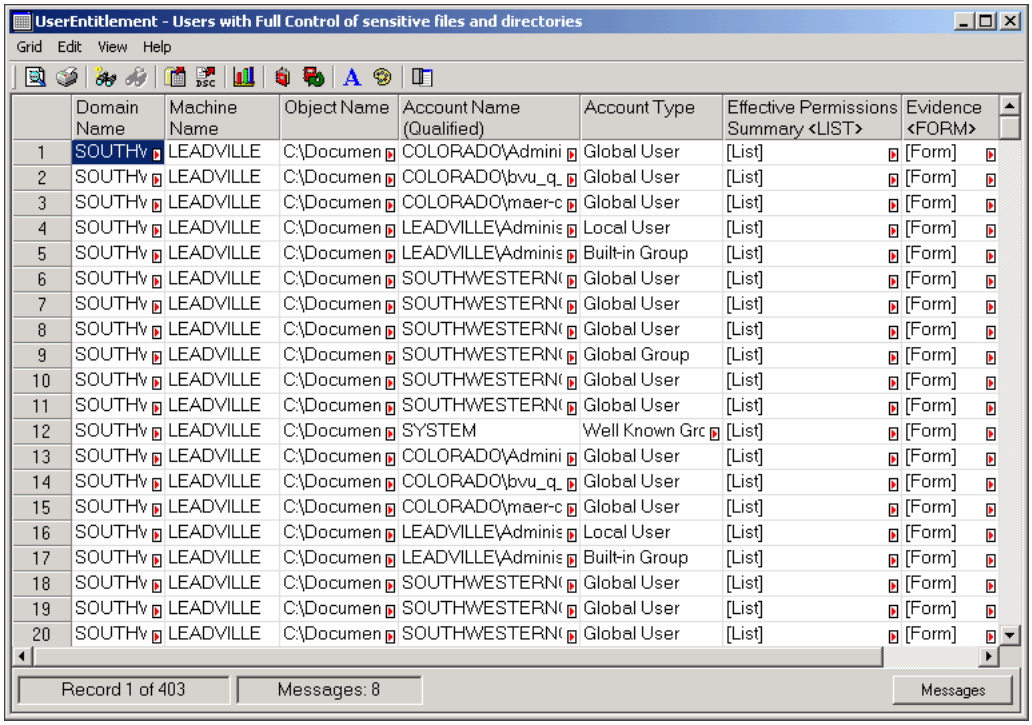
17 Click **OK** to close the Query Builder.

The **Query Options** dialog appears.



18 Click **Run**.

The query will rerun. The fields you selected will display in the grid.



The same scenario can be used for identifying groups with effective access to files and directories. Simply run the **GroupEntitlement - Groups with Full Control of sensitive files and directories** pre-defined query.

Active Directory® Security Principle Analysis

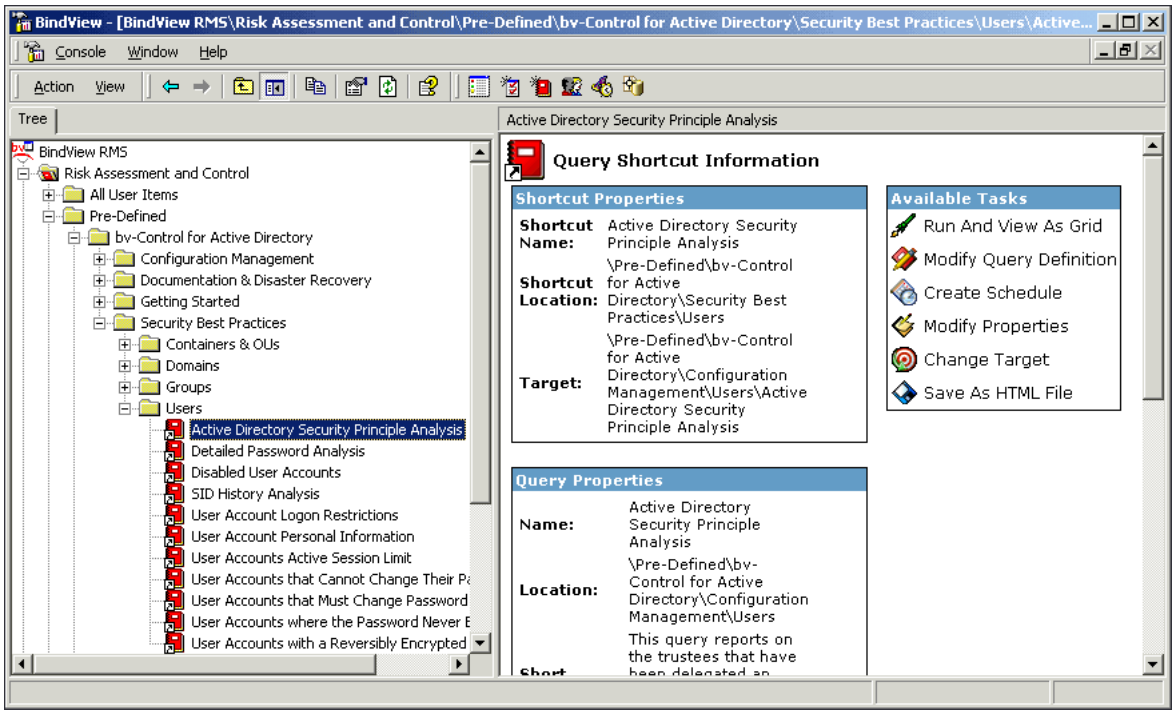
Configuration best practices, patch management, and change control processes are all necessary, but these and other measures cannot ensure the security and availability of critical IT assets if users are granted excessive and inappropriate privileges. Therefore, it is vital that routine assessments are performed to determine who has the ability to manage objects in Active Directory to ensure privileges are only granted to users with an appropriate business need. The bv-Control for Active Directory product automates this analysis allowing administrators to proactively identify and address cases where excessive privileges have been granted.

Scenario 8: Assess Users and Groups that are able to Create, Delete, and Manage Active Directory Groups

This analysis allows a security professional to audit users and groups that have a particular privilege to a security principle.

Run a query that identifies trustees that have been assigned as an administrator on the domain or organizational unit.

1. From the **BindView RMS Risk Assessment and Control** folder, expand the **Pre-Defined** folder.
2. Expand the **bv-Control for Active Directory** folder.
3. Expand the **Security and Best Practices** folder.
4. Double-click the **Users** folder.
5. Double-click **Active Directory Security Principle Analysis**.
6. In the **Available Tasks** section of the details pane, click **Run and View as Grid**.



The grid appears with the fields that included in the query.

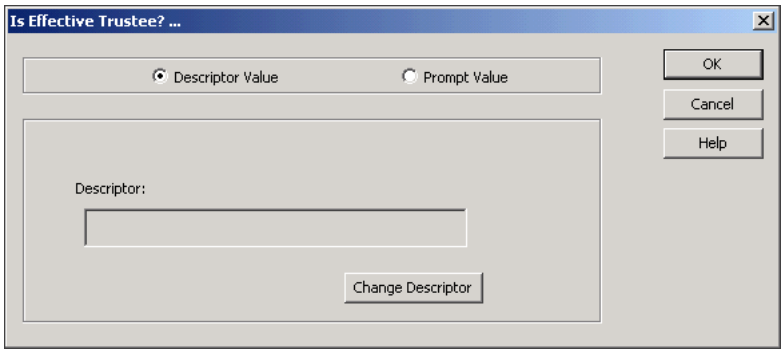
7 Select the **Modify Query** button on the toolbar. The Query Builder appears.

8 Select the **Field Specification** Tab.

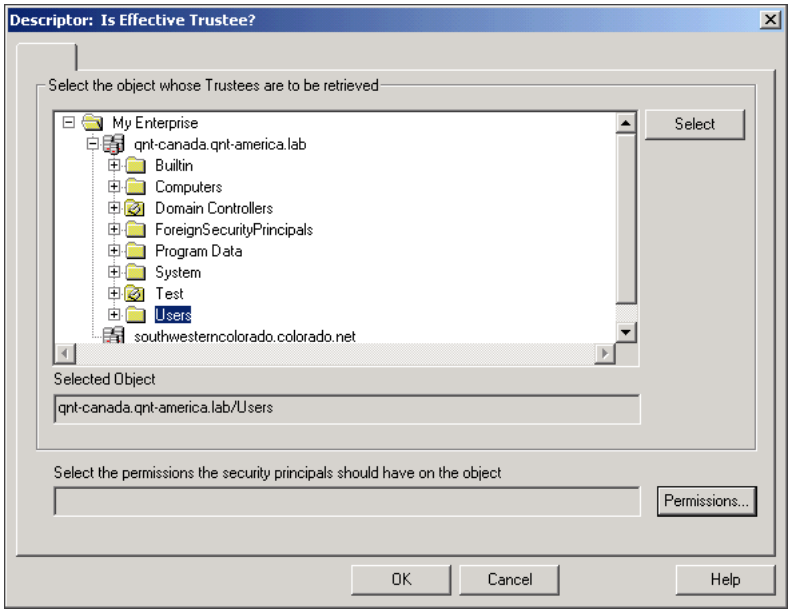
9 Expand the **All Fields** folder.

10 Select the **Is Effective Trustee?...** field and click **Add**.

11 The Descriptor dialog appears. Click **Change Descriptor**.

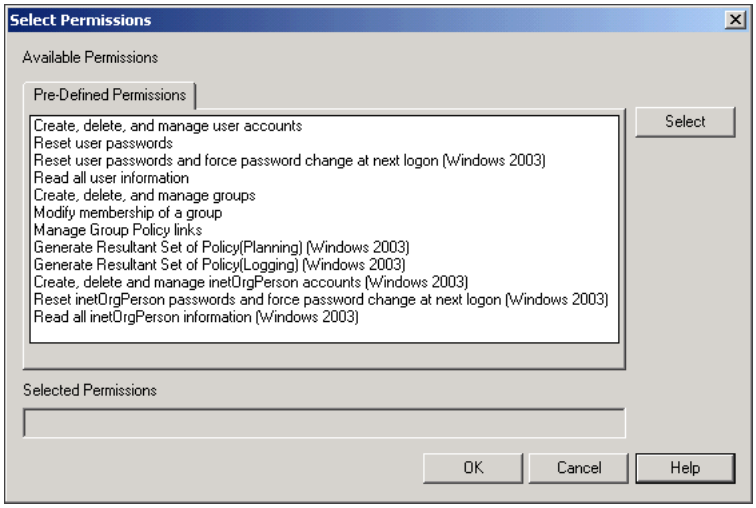


The **Descriptor: Is Effective Trustee?** dialog appears. Use this dialog to choose the object whose trustees are to be retrieved.



12 Browse to the object and click **Select**. The object will display in the **Selected Object** box.

13 Click the **Permissions...** button. The **Select Permissions** dialog appears.



Use this dialog to select the permissions to be used for querying on a specific user, group, or computer and determine whether the security principal account is an effective trustee on the Active Directory object selected in the descriptor dialog.

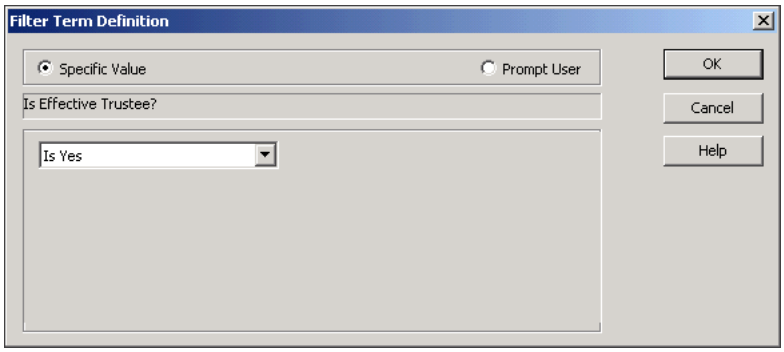
14 Click on the **Create, delete, and manage groups** permission and click **Select**. The permission will be added to the Selected Permissions box.

15 Click **OK** to close the Select Permissions dialog.

16 Click **OK** to close the Descriptor dialog.

17 Click **OK** to close the next dialog.

The **Filter Term Definition** dialog appears.

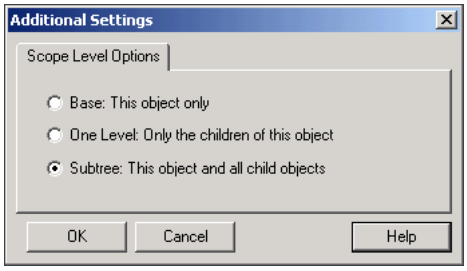


18 Ensure that the **Is Yes** value is selected in the drop-down list. Click **OK** to close the dialog.

19 On the Query Builder, click the **Scope** tab.

20 Scope to a user OU and click **Add Scope**.

The **Additional Settings - Scope Level Options** dialog appears. Use this dialog to determine the depth of the level that will be queried in the scope.

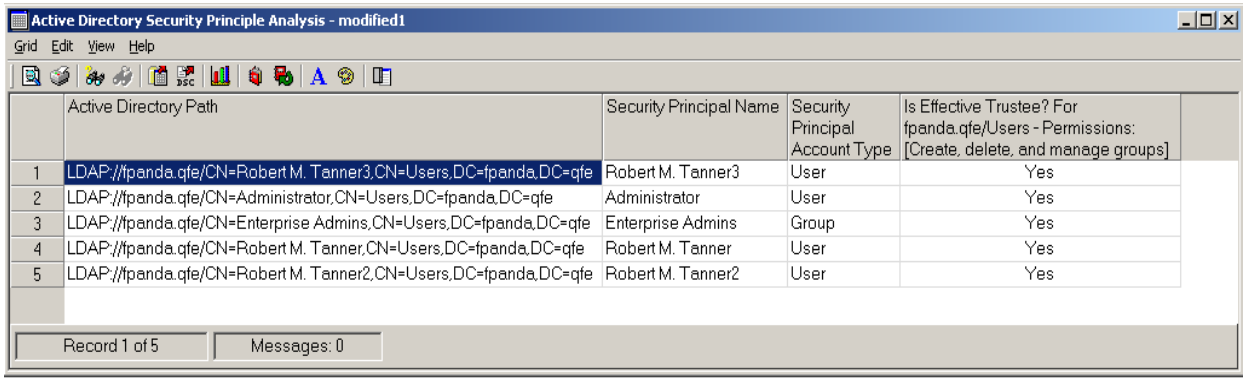


21 Make your selection and click **OK** to close the dialog and return to the Query Builder.

22 The **Query Options** dialog appears. Click **Run** to generate the query.

23 The **Query Completion Wizard** appears. Click **Next** to complete the query.

The query wizard will guide you through the same procedure explained above. The dataset will appear with the value in the **Effective Trustee?... field** as **Yes**.



Web Services

The recent publication of serious vulnerabilities in Microsoft-IIS means that a majority of Internet sites can be remotely exploited if not patched. Daily tasks such as keeping up with patch-level versions, identifying the machines with IIS installed, and troubleshooting access-control problems on the website are further complicated because there is no central console for multiple machines, configuration settings drift over time, and there is no efficient way to manage Web services remotely–maintenance is very "hands-on."

Web Services, Microsoft-based platforms, helps Web administrators and information security groups manage Web services configuration settings, diagnose website problems, and enforce security policies.

Web Services can:

- Report patch levels and versions
- Identify changes to virtual files, directories, and shares
- Provide IIS server lock down templates based on guidelines from the National Security Agency (NSA)
- Drill-down to details regarding NTFS permissions-specific access rights
- Identify unauthorized ISAPI filters, default samples installed, and unnecessary default services

Identifying Changes to Virtual Files, Directories, and Shares

Web Services provides the ability to use MD5 Checksum encryption to determine changes to virtual files, directories, and shares. Encryption technology is one of the most accurate methods to use in determining changes to Web content.

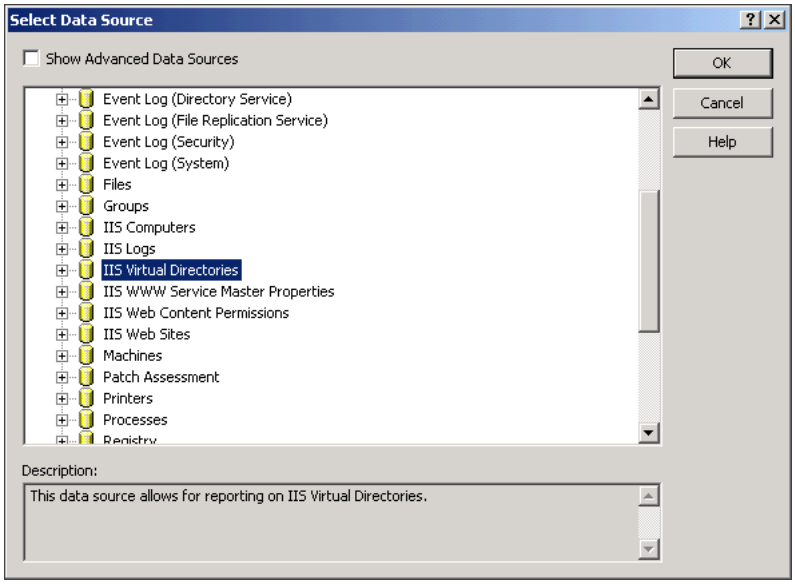
Every morning, the Web administrator schedules a baseline report to run on all virtual files, directories, and shares to identify what files have changed in the last 24 hours. Knowing what has changed in the virtual environment is valuable information when running daily maintenance routines, responding to an intrusion-detection alert, or troubleshooting a technical problem with the Web site.

Scenario 9: Using MD5 Checksum Functionality to Show Variances in Data

Generate a baseline report by creating a query on a data sample from the virtual files, directories, and shares. Use the MD5 checksum functionality to show variances in the data.

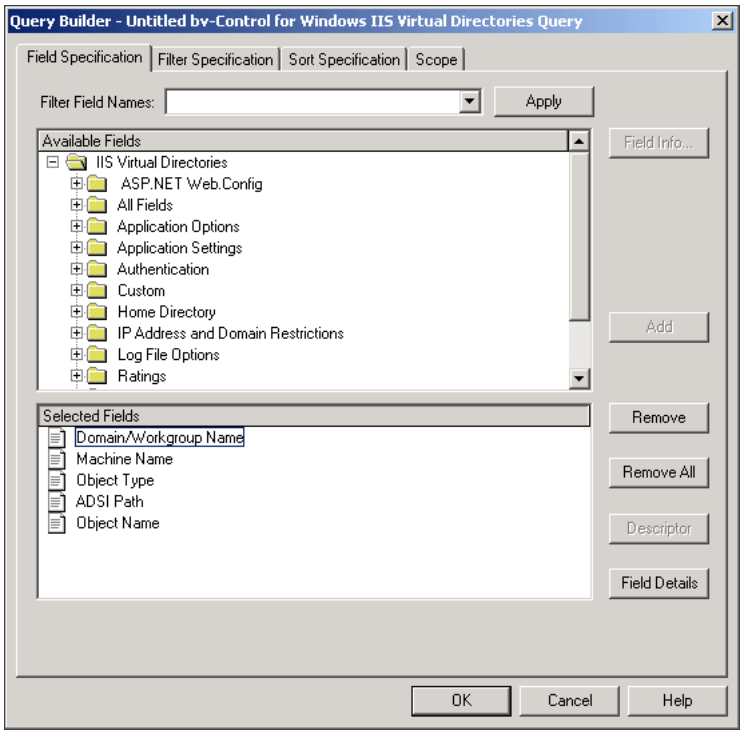
1 On the BindView RMS Console toolbar, click the **New Query** icon.

The **Select Data Source** dialog displays.



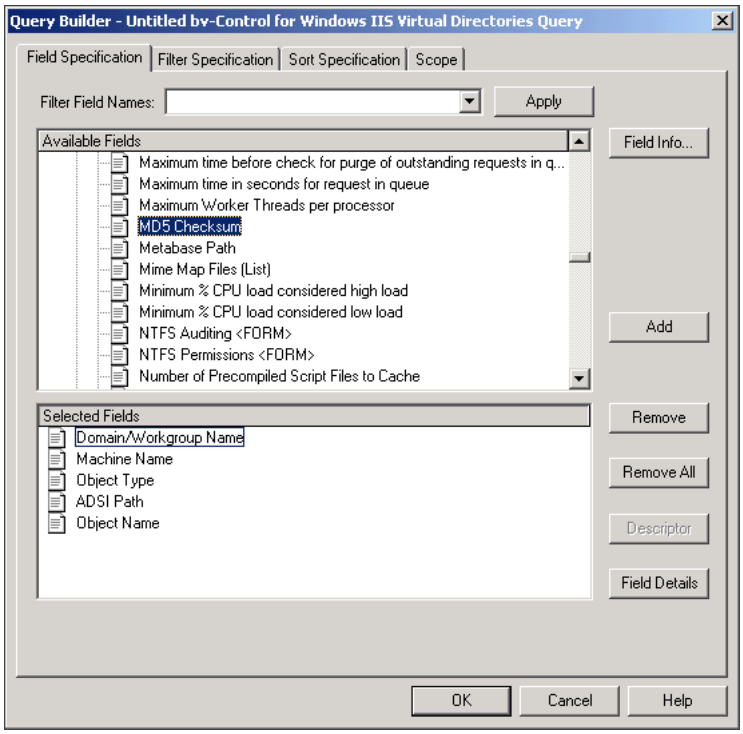
2 Select the **IIS Virtual Directories** data source, and click **OK**.

The **Query Builder** dialog displays.



3 Expand the **All Fields** folder to display all available fields.

The **All Fields** container opens and displays all available fields.

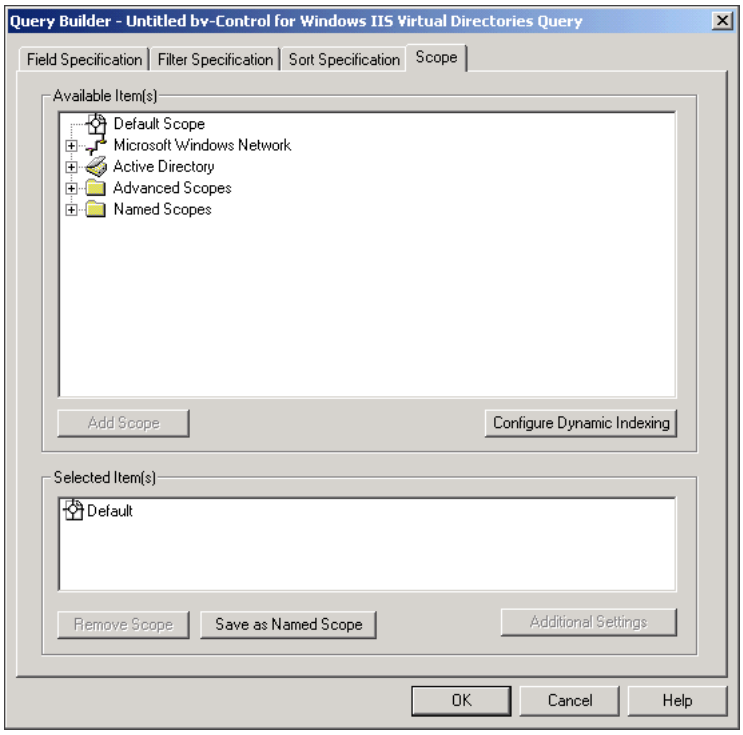


4 Select the **MD5 Checksum** field and click **Add**.

The MD5 Checksum field is added to the **Selected Fields** box.

5 Select the **Scope** tab.

The **Query Builder - Scope Tab** dialog displays.

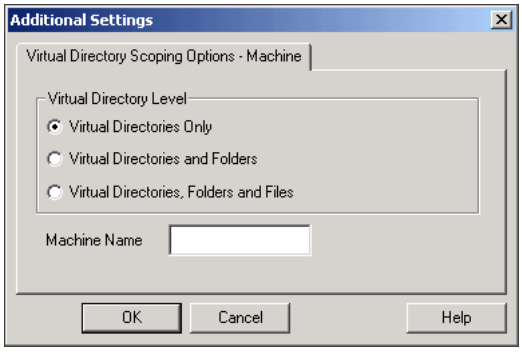


6 Expand the **Advanced Scopes** container.

The Advanced Scopes container opens and displays the available Advanced Scopes for the selected data source.

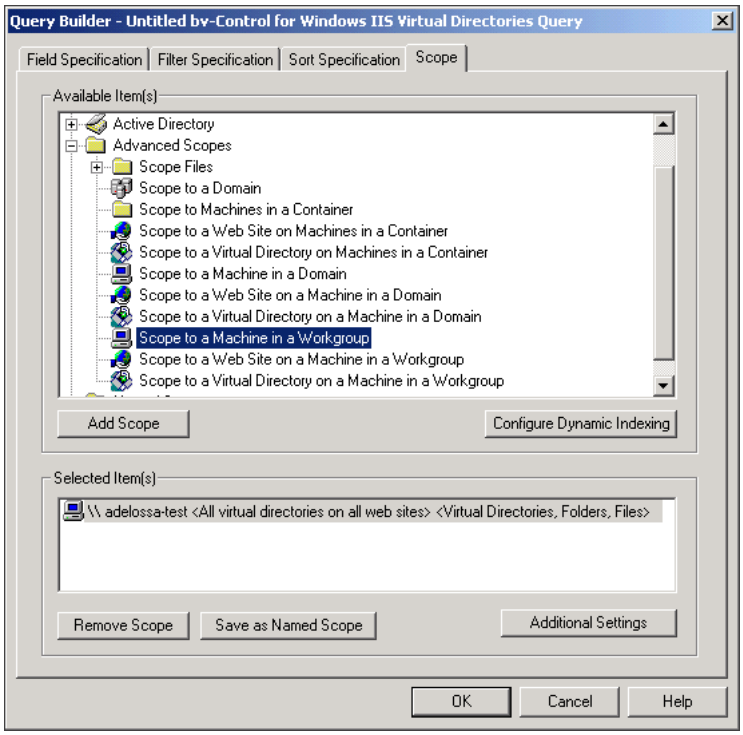
7 Select the type of Advanced Scope you want to add to the query and click **Add Scope**.

The **Additional Settings** dialog for that scope displays. The contents of the dialog will differ depending on which Advanced Scope type you choose. In this example, we selected Scope to a Machine in a Domain.



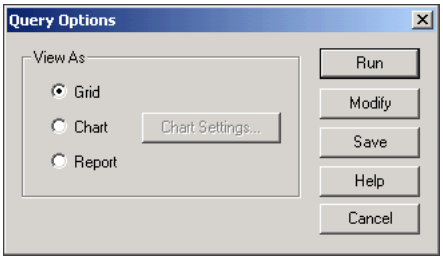
8 Enter the relevant information for the Advanced Scope and click **OK**.

The Advanced Scope item is added to the current scope as shown in the **Scope Tab - Selected Item** dialog.



9 Click **OK**.

The **Query Options** dialog displays.



10 click **Run** to generate and view the report.

Run this report daily and compare the baseline values to determine if any changes have occurred in the MD5 Checksum field. Any changes in the field value may indicate problems that have been caused by content changes on the Web site.

Using an IIS Server Lock Down Template

Web Services provides valuable security knowledge and experience to the Web administrator in the form of pre-defined queries for locking down an IIS server. The BindView elite security team, RAZOR, has created a template of reports to lock down an IIS server based on best practices issued by the National Security Agency (NSA).

A new IIS server needs to be moved online or an existing IIS server has been brought down for maintenance. Before placing the new or rebuilt IIS server online, the Web administrator can run an audit on the server (in the test environment) to ensure that all default settings have been removed and patches have been properly applied.

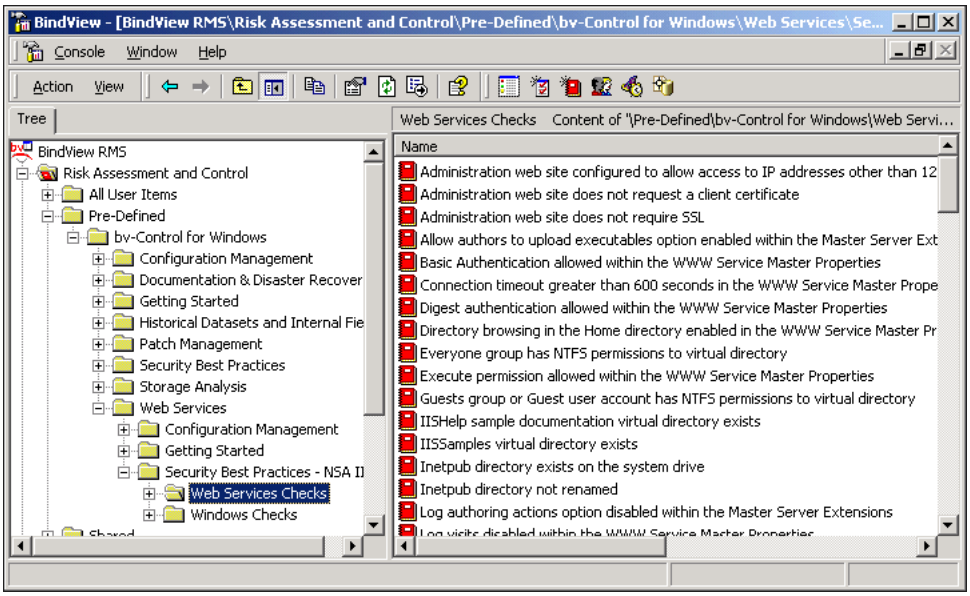
Scenario 10: Determine if Settings and Patches are Applied Correctly

Run a pre-defined NSA IIS5 report to determine if all of the default settings have been removed from the server and that all patches have been applied correctly.

1 From the BindView RMS Console, navigate to the **Security Best Practices - NSA IIS5** folder.

2 Expand the **Web Services Checks** folder.

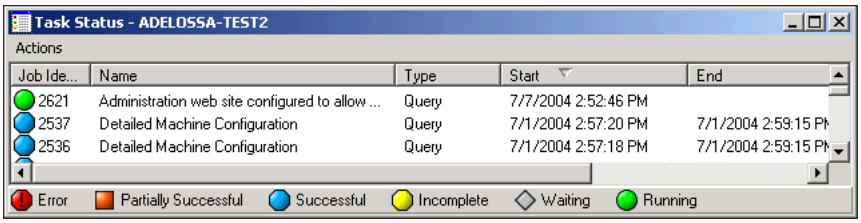
The available pre-defined query reports are displayed.



3 Select the query report that you want to run and right-click.

4 On the shortcut menu select **Run**, **And View As Grid**.

The query building process starts. The **Task Status** dialog is displayed.



If you selected View as Grid, your report will be displayed when completed. If you selected View as Chart, when your report is complete, the Chart Builder Wizard will be launched. Use the Wizard to create the look of your chart.

Reviewing Permissions to Web Site Home Directory

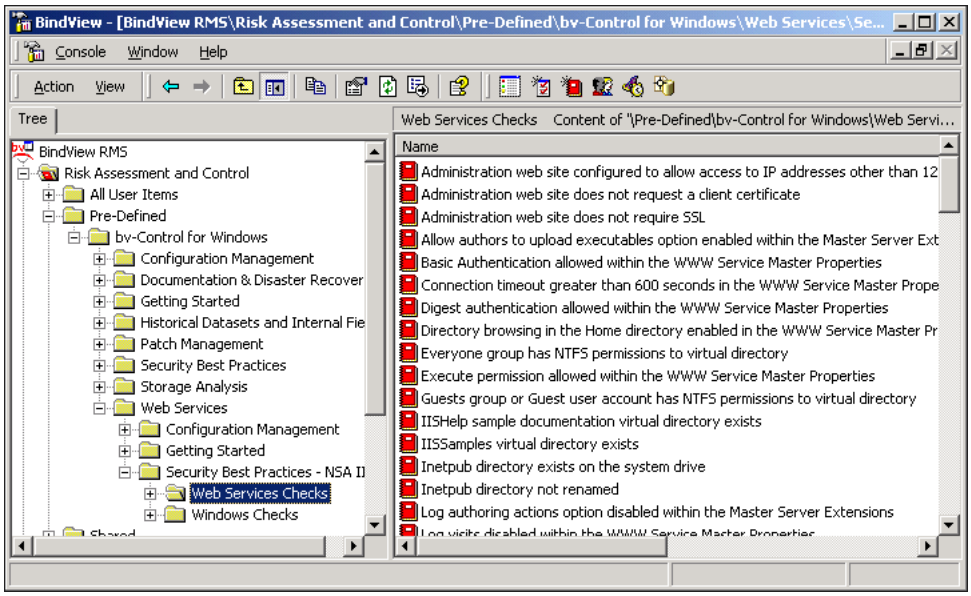
In a Web administration team environment, managing rights and permissions to the Web Site home directory is essential. Web Services provides a centralized, granular view of NTFS permissions, and specific access rights.

The Web administrator discovers that several virtual folders have been deleted in error. To identify the point of failure, an audit is needed to identify user accounts that have more than Read permissions to the Web Site home directory.

Scenario 11: Determine Users with Read Permissions to the Web Site Home Directory

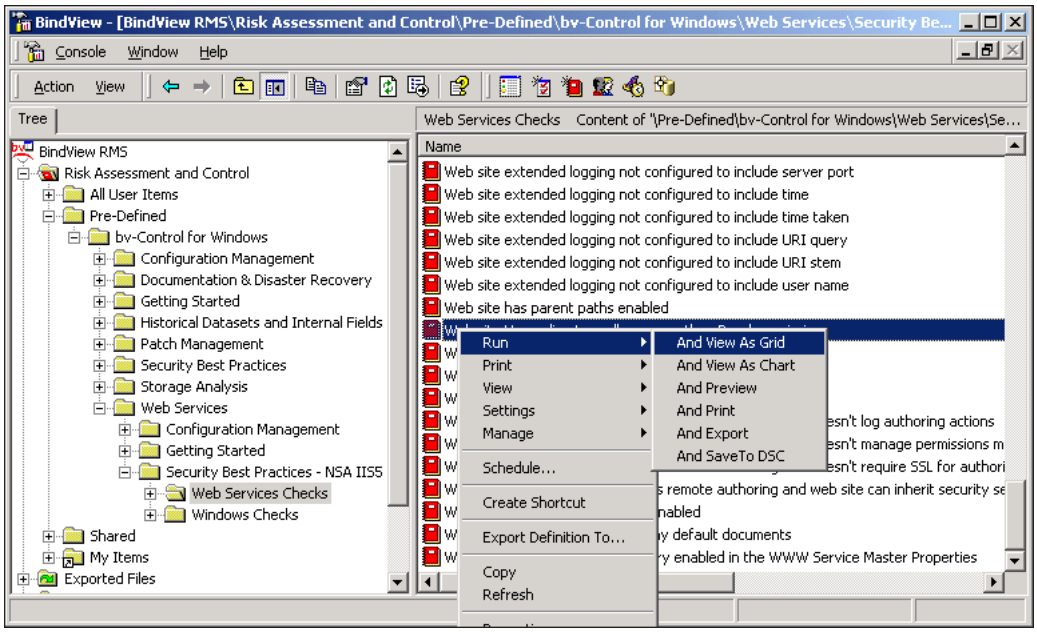
1. From the BindView RMS Console, navigate to the **Security Best Practices - NSA IIS5** folder.
2. Expand the **Web Services Checks** folder.

   The available pre-defined query reports are displayed.



   The available pre-defined query reports are displayed.

3. From the list of reports, select the **Web site Home directory allows more than Read permission** and right-click.



4 Select **Run**, **And View as Grid** from the shortcut menus.

The query building process starts. Your report will be displayed when completed.

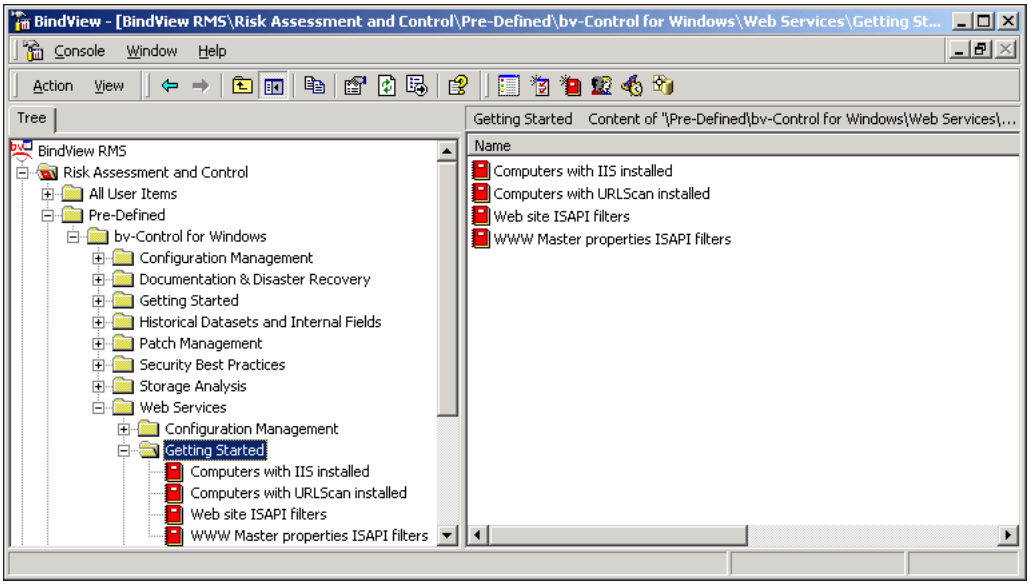
Identifying Unauthorized ISAPI Filters

Effective ISAPI filter management is required to maintain a secure and properly functioning Web service. Web Services enables proactive ISAPI filter management by delivering a centralized, granular view of ISAPI filter settings and properties.

An unauthorized ISAPI filter, if executed, can cause hours of corrective work. An ISAPI filter executed in the wrong order can cause the Web server to not function properly.

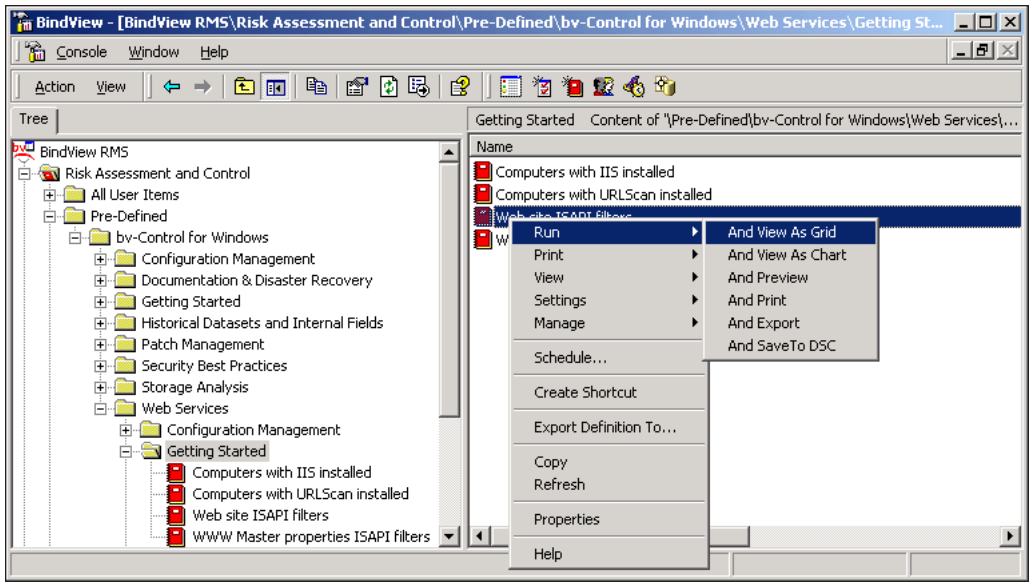
Scenario 12: ISAPI Filter Properties and Settings

1 From the BindView RMS Console, navigate to the **Getting Started** folder.



The available pre-defined query reports are displayed.

2 From the list of reports, select the **Web Site ISAPI Filters** and right-click.



3 Select **Run**, **And View as Grid** from the shortcut menus.

The query building process starts. Your report will be displayed when completed.

Conclusion

The information provided in this Evaluation Guide covers only a few of the features of bv-Control for Windows. However, the scenarios give you an idea of how bv-Control for Windows can help you audit, secure, and manage your Windows environment. As part of the BindView Vulnerability Management solutions family, bv-Control for Windows can assist your organization in properly configuring and protecting your Windows environment, avoid unplanned downtime, and realizing a desired return on IT investments.

Because bv-Control for Windows has a distributed architecture, multiple query engines, and an agent-less architecture, the product can help any size organization maintain control across complex IT environments.

Contacting BindView

BindView has sales and support offices around the world. For information on contacting BindView, please refer to the information below or to the BindView Web site: ***www.bindview.com***

For Technical Support: ***www.bindview.com/support***

Technical Support is available Monday through Friday from 7:00 A.M. to 7:00 P.M. Central Time. Normal working hours for all other departments are 9:00 A.M. to 6:00 P.M.

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