

Permissions Reporter

USER MANUAL

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Introduction

1 Introduction

1.1 Welcome



Permissions Reporter is a powerful file system permissions and security auditing tool for Windows NTFS file systems.

With Permissions Reporter, users can visually explore NTFS file system permissions for any directory on a given drive, path, or network share. It can help to identify files that have permissions that are differing or not inheriting from their parent folder. Permissions Reporter can also help users to understand and visualize the distribution of allocated space by owner and file type.

Permissions Reporter is developed and distributed by Key Metric Software.

1.2 Requirements

Permissions Reporter can be installed on either Windows client or server operating systems, including:

- Windows 10, 8, or 7 (SP1)
- Windows Server 2019, 2016, or 2012 (R2)

32 and 64 Bit Support

Although both 32-bit and 64-bit environments are fully supported, we recommend running Permissions Reporter on a 64-bit computer running a 64-bit edition of Windows, especially when creating file system permissions reports with a large number of results.

Microsoft .NET Framework

Permissions Reporter requires the Microsoft .NET Framework version 4.6.2 or later.

If this requirement isn't met prior to program installation, the installer will offer to download and install it on your behalf.

Getting Started

2 Getting Started

2.1 Tutorial

This tutorial is designed to help you get up and running quickly with Permissions Reporter.

If you haven't already downloaded and installed Permissions Reporter, please do so now. Once installed, start Permissions Reporter via the provided desktop shortcut.

Step 1 - Configure Your First Project

By default, Permissions Reporter will create a new project when it starts for the first time.

A Permissions Reporter project provides the program with information about how to generate a file system permissions report. It includes information about which parts of the file system to analyze, which to exclude, and defines a range of applicable settings.

To begin, click the Settings button in the main window toolbar and select the Folders tab. Use the Add Folder button to choose a folder path that resides somewhere on your computer. You can also analyze remote file systems or import multiple folders, but for now let's keep things simple and report on a single local directory.

Click the **Save** button to commit your project changes and close the Project Settings window.

Step 2 - Run the Project

From the main program window, click the **Run project** toolbar button to start generating a file system permissions report.

The Folder View will begin populating immediately, while other reports such as the Table View and File Report will make their contents available only upon completion of the current permissions analysis.

Step 3 - View the Results

When the file system analysis completes, all enabled report views will be populated with data. You can switch between them using the tabs in the main program window.

There are a number of mechanisms that can be used to narrow down the permissions report results, including scan-time and post-scan filtering. You can also perform column-based filtering in the Folder Report and File Report views.

2.2 License types

Permissions Reporter provides many functions and features for free.

For more advanced functionality, we offer a range of upgrade licenses. If you find this product useful, we would encourage you to support its development and purchase one of the available upgrade licenses from our product website.

Views

3 Views

3.1 Folder Tree

The Permissions Reporter **Folder Tree** tab is accessible through the main program window.

When a Permissions Reporter project is run, the folder view displays a hierarchical, tree-like view of folders throughout the system. Selecting a folder will show a range of details about that folder, including the permissions relating to it as well as information about any sub-folders. You can also expand or collapse folder nodes to see their children.

The folder tree hierarchy also includes permissions nodes that you can select to view additional information about that account, including basic and advanced permissions, information about the account itself, and more.

You can right-click entries within the folder tree to take additional, related actions such as opening a folder in Windows Explorer, copying an account SID to the clipboard, etc.

The contents of the folder report can be filtered to narrow down report results.

3.2 Folder Permissions

The Permissions Reporter **Folder Permissions** tab is accessible through the main program window.

The table view presents information that is similar to the contents of the folder view, only in a flat (non-hierarchical view) with powerful grouping and column filtering capabilities.

- **Column sorting** - Click any column header to sort the report by that column. Click again to reverse the sort order.
- **Column grouping** - Click a column header and drag it into the grouping area of the report to group by that column. For example, grouping by the Account column is an excellent way of viewing folder-level permissions for each individual account using them.
- **Column filtering** - Click the small filter icon in any report column to filter the values it contains. Quickly isolate a subset of values within the report.

In addition to the column-level filtering mentioned above, the contents of the folder list report can also be limited by filtering.

You can right-click entries within the table view to take additional, related actions such as opening a folder in Windows Explorer, copying an account SID to the clipboard, and more.

You can also choose which columns appear within the report by clicking the small square list icon in the upper right corner of the report.

3.3 File Permissions

The Permissions Reporter **File Permissions** tab is accessible through the main program window.

The file list report contains records about specific files of interest, as configured by the File Permissions Report section of the Project Settings. By default, the file report shows files that are not inheriting permissions from their parent folder or have permissions differing from their parent folder.

The file report supports a range of advanced features, including:

- **Column sorting** - Click any column header to sort the report by that column. Click again to reverse the sort order.
- **Column grouping** - Click a column header and drag it into the grouping area of the report to group by that column.
- **Column filtering** - Click the small filter icon in any report column to filter the values it contains. Quickly isolate a subset of values within the report.

You can right-click entries within the file report to take additional, related actions such as opening a folder in Windows Explorer, copying an account SID to the clipboard, and more.

You can also choose which columns appear within the report by clicking the small square list icon in the upper right corner of the report.

Tip: If you don't need the contents of the file report, disable it to conserve memory and improve performance.

3.4 File Owners

The Permissions Reporter **File Owners** tab is accessible through the main program window.

The owner report view shows the distribution of data within the file system by owner and file type. It has two sub-views:

- **Report view** - Shows owners and their file type distributions in a hierarchical tree / list view
- **Treemap view** - Renders rectangles that represent file system object owners (user accounts), while the inner rectangles show which file types are using the most space.

3.5 Share Permissions

The Permissions Reporter **Share Permissions** tab is accessible through the main program window.

The share report contains information about share-level permissions. For each folder path added to your project, the program will extract the associated host name and then build a list of shares (and their permissions) for it. You can control precisely which shares are included via the share permissions report project settings.

The share report supports a range of advanced features, including:

- **Column sorting** - Click any column header to sort the report by that column. Click again to reverse the sort order.
- **Column grouping** - Click a column header and drag it into the grouping area of the report to group by that column.
- **Column filtering** - Click the small filter icon in any report column to filter the values it contains. Quickly isolate a subset of values within the report.

You can also choose which columns appear within the report by clicking the small square list icon in the upper right corner of the report.

Note: Because administrative shares (such as "\\server\C\$") cannot change, they are not included in the share report.

Projects

4 Projects

4.1 About Projects

A Permissions Reporter **Project** contains all the information and settings required to generate a permissions report.

IMPORTANT: When a project is saved, the resulting file does not contain any currently available permissions report data. If you wish to save report data, please use the Export feature to do so.

The name of the currently loaded project (if any) will be shown in the main window title bar.

Creating Projects

Select the **New project** button in the main window toolbar to create a new project. The Project Settings window will be displayed, allowing you to configure the new project according to your needs.

Saving Projects

Permissions Reporter projects are saved to the file system in XML file format. To save the current project settings to the file system, click the **Save** button in the main window toolbar. You can also use **File | Save Project As** to save the current project under a new file name.

Loading Projects

Use the **Load** button within the main window toolbar to load a project from the file system.

Running a Project

Use the **Run project** button in the main window toolbar to generate a permissions report using the current project settings.

4.2 Project Settings

4.2.1 About Project Settings

A Permissions Reporter project's settings determine which portions of the target file system(s) are analyzed, as well as what the resulting permissions reports contain.

A project's settings include the following (click a link below to learn more).

- [Project folders](#)
- [File permissions](#)
- [File owners](#)
- [Share permissions](#)
- [Path exclusions](#)
- [Group member extraction](#)
- [Project filter](#)
- [Authentication](#)

4.2.2 Project Folders

A Permissions Reporter project allows you to define which portions of the file system are targeted for permissions reporting.

Permissions Reporter supports a wide range of folders, including:

- **Local drives** (i.e. "c:\")
- **Local folders** (i.e. "c:\program files")
- **Network paths** (i.e. "\\server\share\folder")

Adding a Folder

Click the **Add Folder** button to add a file system path. The resulting pop-up window provides three means of adding folders to the project:

- **Add a single folder** - Browse for a local or network file system path, or enter one directly by typing it in.
- **Import folder list from a text file** - Allows you to import a list of file system paths from a text file. The text file should contain a list of paths to be imported, each on a separate line.
- **Discover shares** - Provides a means of listing shares on one or more computers or domains (separate multiple entries with a comma).

Removing Folders

Select one or more folder paths (hold the CTRL key down to select multiple entries) and click the **Remove Selected** button to remove them.

Tip: If you uncheck an entry in the folder list, it will be ignored during permissions report generation. This provides an easy way to disable a folder path without removing it.

4.2.3 File Permissions Report

A Permissions Reporter project allows you to configure which file system entries will be included in the File Report. It also allows the File Report to be enabled or disabled.

When the File Report is enabled, you have the option of including:

1. **Files not inheriting permissions from their parent folder**
2. **Files with permissions not present in parent folder**
3. **Files lacking permissions present on parent folder**

Tracking File Permissions Differences

Enabling the "track permissions differences" option will cause Permissions Report to retain information on which specific file permissions differ from their parent folder. Using this option will increase program memory usage.

These differences will then become available to users reviewing the file report results in the form of collapsible / expandable nodes.

Permissions differences can also be included in report export data.

Excluding System Files

There's also an option (enabled by default) available for excluding files with the "system" NTFS attribute set.

Maximum File Report Entries

By default, Permissions Reporter limits the maximum number of files that can be displayed in the File Report to 999,999 entries.

This default limitation exists because very large file systems may contain many millions of files that match the default file report criteria. Tracking and displaying all such files can consume an inordinate amount of system memory and significantly impact performance. Additionally, making use of a file report containing millions of entries is generally impractical.

If you need to track an unlimited number of entries in the File Report, set the maximum number of file report entries to -1. Keep in mind that doing so may negatively impact performance and increase memory usage (potentially resulting in "out of memory" errors).

4.2.4 File Owners Report

A Permissions Reporter project allows you to configure what information is included in the Owners Report.

First, you can enable or disable the report. If you don't need the contents of the Owners Report, we recommend disabling it to improve performance.

You can also determine the maximum file type block granularity, which determines the maximum number of file type rectangles to display for each user account within the report. Please note that setting this value to a large number will degrade display performance.

4.2.5 Share Permissions Report

A Permissions Reporter project allows you to configure what information is included in the Share Report.

The following options are available:

- **Report no share information** - Disables the share report entirely.
- **Report all shares for each host contained within project folders** - Lists shares on each host computer encountered within the current project folder list.
- **Report only on shares contained within project folders** - Lists shares only if they are explicitly referenced within the current project folder list.
- **Report on shares on these hosts** - Discovers and reports on shares on one or more hosts.
- **Report on shares in these domains** - Discovers and reports on shares on one or more domains.

Note: Since the permissions on administrative shares (such as "\\server\C\$") cannot change, they are not included in the share report.

4.2.6 Path Exclusions

A Permissions Reporter project allows you to configure which folders will be ignored during permissions report generation.

Adding an Exclusion

Click the **Add Exclusion** button to add an excluded folder. The resulting pop-up window offers two types of exclusion:

- **Exclude path** - Allows you to exclude a fully qualified file system path (i.e. "c:\windows") during report generation.
- **Exclude folders named** - Allows you to exclude all folders that match a specified name (i.e. "temp").

More Exclusion Options

- **Exclude system folders** - When engaged, this option causes any folder with the NTFS "system" attribute to be excluded.
- **Skip mount points, symbolic links, and junctions** - Most of the time it is not desirable to traverse such folders, since they redirect to other parts of the file system.
- **Exclude folders deeper than level** - Allows you to exclude folders exceeding a specified depth level.

Important: When a part of the file system is excluded, no data will be collected for it or its sub-folders. Therefore, none of the reports available within this program will reflect the contents of excluded portions of the file system.

4.2.7 Group Member Extraction

The following report options are available.

Note: Group membership extraction can negatively affect report generation performance, so it's best to enable these options only if you need them

Group Membership

- **Extract group members** - Enabling this option will cause Permissions Reporter to extract membership information for groups. Groups shown in the main window folder view can then be expanded to show their members.
- **Extract nested group members** - By default, the above option extracts only top-level group membership. Use this option if you wish to extract nested group membership information as well.

Excluded Groups

Groups that are added to the exclusion area will not have their membership extracted and displayed within Permissions Reporter.

An example use of this feature would be to suppress the expansion of the "domain users" group, which contains all users.

4.2.8 Project Filter

Permissions Reporter provides advanced report filtering capabilities that can be applied either during or after the file system analysis.

Please see this related topic for more information.

4.2.9 Authentication

A Permissions Reporter project allows you to provide authentication credentials for permissions reports. There are two authentication mechanisms available.

Windows Account Impersonation

When Windows impersonation is enabled, Permissions Reporter will use the provided user account credentials to log into Windows and then execute the file system analysis while impersonating that user.

This option is useful in cases where you need to log into a remote Windows machine with a specific user account in order to gain access to its file system, etc.

When analyzing domain members, we recommend impersonating a domain admin. Otherwise, we recommend impersonating a local admin.

You can also use the "Impersonate only for outbound connections" option, if needed. This will cause the provided credentials to be used only when authenticating for remote connections, otherwise the identity of the currently logged-in user will be used.

Network Authentication

You can use network level authentication to access non-Windows network devices. For example, if an external NAS device requires a username and password, use this option to authenticate to it.

This setting applies to **network paths only**, and will be ignored when accessing local volumes.

Tools

5 Tools

5.1 Global Options

Permissions Reporter provides a number of options that are global, meaning that they apply regardless of which project is currently loaded.

General

- **Enable automatic update checks** - When enabled, Permissions Reporter will check for updates automatically when it starts up.
- **Automatically reload last saved project** - When enabled, the last loaded project is re-loaded when Permissions Reporter starts up.
- **Apply colors to highlight permissions levels** - When enabled, permissions levels with the folder and table views will be colored.
- **Maximum log file entries** - Indicates the maximum number of log file entries that will be held in memory. When this number is exceeded, the oldest entries will be purged to make room for new ones.

Email

Permissions Reporter supports the ability to email permissions reports to one or more recipients during command line or scheduled operations.

In order for email functions to function correctly, you must first configure Permissions Reporter to communicate with your mail service provider.

If you're unsure about that values to use in the server settings configuration area, please contact your mail server provider for details.

Performance

- **Enable caching of account details retrieved from Active Directory** - Caches account details in memory, resulting in considerable performance benefits. Disable only in low-memory environments.
- **Resolve object display names via Active Directory** - Uses Active Directory queries to get more information about accounts.
- **Resolve object state (enabled/disabled) via Active Directory** - Uses Active Directory to query about the enabled/disabled state of accounts.
- **Enable low priority I/O mode** - Enable this option if you want I/O operations performed by Permissions Reporter to run at background priority, making file system scans less likely to interfere with other disk operations. Changing this setting requires that you restart Permissions Reporter.
- **Maximum analysis threads** - Determines the maximum number of threads to use during permission report generation. By default, threads will be allocated automatically based upon the number of available cores. If you find that this approach consumes too many computational resources, try limiting the program to one or two threads.

5.2 Command Line

Permissions Reporter accepts several command line arguments to facilitate scheduling and automation. The command line can also be used just to load a specific project on start-up.

Each command line argument is explained in more detail below.

Required Arguments

Execution via the command line **requires** that you use either the `"/project"` or `"/compare"` parameters to either execute an existing project or compare two existing XML exports (respectively).

`/project [project.xml]`

You must provide a fully qualified path to an existing project file to execute. If you haven't already created and saved a project file, you can do so from within the main program interface. The project file contains everything required to generate a permissions report, including folder paths, filter settings, etc.

`/compare /source:[source.xml] /target:[target.xml] /export:[results.xlsx]`

Use this parameter if you wish to trigger the comparison of two existing *source* and *target* XML permissions data files and then export the result.

When using the *compare* parameter, the *source*, *target*, and *export* command line parameters are also required. All paths should be full qualified (relative paths are not supported).

Important: *Permissions comparison data exports are limited to two file formats - CSV (.csv) or Excel (.xlsx), depending on the export file extension you specify.*

Additional Arguments

`/export [results.html]`

Use this parameter to trigger the creation of one or more export files after the permissions report has been generated. All export paths must be fully qualified.

The format of the resulting file is determined by the file name extension used in the export path. Supported output file types include HTML (.html), XML (.xml), MS Excel (.xlsx) and CSV (.csv).

Multiple file system paths can be specified by separating them with a pipe symbol.

`/email [address@domain.com]`

Use this parameter to send all export files created via the `/export` parameter to a user via email. All export files will be zipped into a single file prior to being emailed. In order to use this feature, you must first configure and test email integration settings within the global options window. Multiple email addresses may be specified, separated by a comma or semicolon. **Before using this feature, test to ensure that the size of export files being generated are within acceptable limits for transmission via email.**

/appenddate

Use this parameter to automatically append a date/time stamp to the end of any export files. The format of the appended date/time string is "yyyyMMdd_HH:mm:ss" (so, for example, an export path of "c:\temp\report.html" might become "c:\temp\report_20150414_091000").

/savelog [log.csv]

The parameter saves the current in-memory error log to the specified path in CSV file format. If the target log file already exists, it will be overwritten. Use this parameter when troubleshooting command line operations.

/exportConfig [config.xml]

This parameter will load export configuration data from the specified file path, thereby allowing you to specify which data elements (including columns) should be exported.

/folders [paths.txt]

If this optional parameter is specified, it will be used to *override* the folder list specified in the project file (see "/project" parameter above).

This parameter can accept a set of paths in one of two formats. If you pass a text file path (ending in the .txt file extension), project folder paths will be read from it directly - assuming one path per line in the text file. Alternatively, you can pass in one or more explicit folder paths, each separated by pipe symbols. See below for examples.

Purging Old Export Files

The command line interface allows you to *permanently* purge existing export files older than a given number of days.

IMPORTANT: Incorrect use of this feature could cause unexpected data loss. Make sure you understand exactly how it works (and which files will be affected) and test thoroughly before using it.

When the "/purgeolderthan" command line parameter is used, Permissions Reporter will remove ALL report file types (HTML, XML, CSV, PDF, etc.) older than the specified number of days from ALL report output folders. Such files will be removed regardless of what user or program created them. This process will occur each time the command line operation executes.

We strongly recommend that you only use this option in cases where your report output folders are dedicated to the retention of Permissions Reporter reports (and nothing else).

Important Note

On modern Windows operating systems, the Windows task scheduler (which is leveraged by Permissions Reporter for scheduling) runs all tasks non-interactively (e.g. "hidden") unless you specifically configure them to "run only when user is logged on".

For this reason, when run via the scheduler Permissions Reporter will always run silently and exit automatically upon task completion.

Examples

```
permissionsreporter.exe /project "c:\project.xml" /export "c:\output.html"
```

Runs using the specified project file, and exports the resulting report as HTML.

```
permissionsreporter.exe /project "c:\project.xml" /export "c:\output.htm | c:\output.xml" /email "address@domain.com"
```

Runs using the specified project file, and exports the resulting report as both HTML and XML. These export files are then both zipped and emailed to "address@domain.com".

```
permissionsreporter.exe /project "c:\project.xml" /folders "c:\folders.txt" /export "c:\output.html"
```

Overrides the folders specified in the project file by reading them (one path per line) from "c:\folders.txt".

```
permissionsreporter.exe /project "c:\project.xml" /folders "c:\folder1 | c:\folder2" /export "c:\output.html"
```

Overrides the folders specified in the project file by specifying one or more explicit folder paths (separated by pipe symbols).

```
permissionsreporter.exe /compare /source:"c:\source.xml" /target:"c:\target.xml" /export:"c:\output.xlsx"
```

Generates a permissions comparison report in Excel format based on the specified source and target XML files.

5.3 Scheduler

5.3.1 About Scheduled Tasks

Permissions Reporter offers the ability to schedule the creation of permissions reports.

The resulting report can be saved to the file system and/or emailed to one or more recipients.

Permissions Reporter integrates with the Windows Task Scheduler to provide this functionality, allowing for very flexible and reliable scheduling. For more advanced scheduling scenarios, you can edit the task directly from within the Windows Task Scheduler.

5.3.2 Scheduled Tasks List

Clicking the **Scheduler** button in the main window toolbar will cause the Scheduled Tasks window to appear.

Adding a Task

Click the **New Task** toolbar button to create a new scheduled task. The scheduled task editor window will appear.

Run a Task

Select a task and click the **Run Task** toolbar button to execute it immediately.

Stop a Task

A running task can be stopped by clicking the **Stop Task** toolbar button.

Edit a Task

Select a task and click the **Edit Task** toolbar button to edit it.

Delete a Task

Select a task and click the **Delete Task** toolbar button to delete it. You will be prompted for confirmation when taking this action.

5.3.3 Editing Scheduled Tasks

The Permissions Reporter scheduled task editor is comprised of two tabs, as follows:

Task Properties

The following task properties are available when scheduling the creation of a permissions report.

Project Path

Provide a fully qualified path to an existing Permissions Reporter project file. If you haven't already done so, you'll need to create and save a project before proceeding.

Export

You can export the contents of a scheduled permissions report in a variety of formats. For each of these, please be sure to specify a fully qualified export file path (relative file paths are not supported). Please review the Exporting help topic for more information on export file formats, etc.

Options

- Append date/time to export file names - Automatically appends the current date/time to all export file paths. See the Command Line help topic for details.
- Email zipped report file(s) to - Causes all export files to be zipped and emailed to the specified recipients. See the Command Line help topic for important information about this option.
- Save error log file to - Allows the in-memory error log to be saved to the file system. Useful for troubleshooting and informational purposes.
- Use export config - Loads export configuration data from the specified file path, thereby allowing you to specify which data elements (including columns) should be exported.
- Purge files older than - Removes all export file types (HTML, CSV, etc.) from every report output folder relating to this scheduled task. See the Command Line help topic for more information.

Schedule

This tab allows you to specify an execution schedule for the current task. The following scheduling options are available:

- **One time** - Run once, and do not repeat
- **Daily** - Allows for daily recurrence at a specified time.
- **Weekly** - Allows for weekly recurrence at a specified time. You can also choose which days of the week will trigger task execution.
- **Monthly** - Allows for monthly recurrence, either on a specific day of each month or at specific week day intervals.

Report Data

6 Report Data

6.1 Filtering

Permissions Reporter provides advanced report filtering capabilities that can be applied either during or after the file system analysis.

Filters are useful for constraining the output of Permissions Reporter. For example, filtering can be used to report upon the file system permissions of a specific user or group.

Filters are comprised of conditions that must be met in order for permissions entries to be included in a report. Conditions are contained within groups, which can be arbitrarily nested to produce complex rule sets.

Scan-Time Filtering

When you modify the filter for the current Permissions Reporter project and then run the project, your filter rules will be applied during the file system scanning process.

Scan-time filtering affects the amount of actual data stored in memory. Folder and permission entries that don't match the current project filter will not be stored, thereby reducing the program's overall memory footprint. The larger the file system analysis workload, the more these memory savings tend to show themselves.

To apply scan-time filtering, click the **Filter** button in the main window toolbar and select **Configure project (scan-time) filter**.

Post-Scan Filtering

You can also filter the results of a permissions report *after* the scan completes. You do this by clicking the Filter button in the main window toolbar, and selecting the appropriate option.

If you intend to perform post-scan filtering, we recommend that you do not use Scan Time (project level) filtering at the same time.

To apply post-scan filtering, click the **Filter** button in the main window toolbar and select the **Post-scan filter** option.

Filter Groups

Filter groups are used to determine whether report permissions match ANY or ALL conditions specified within the filter. They control the match scope of both child conditions and child groups.

Filter groups can be nested to create arbitrarily complex rule trees, each with their own match scope and conditions.

Filter Conditions

Filter conditions allow you to specify the criteria against which filters are tested - they must match in order for permissions to be included in a report.

Each condition has a type (e.g. "Account name", "Account enabled", etc.), an operator (e.g. "Is equal to", "Is not equal to", etc.) and a value. When the condition type is selected, the operator and value inputs will change accordingly.

Filter conditions are defined by clicking the **Add** button next to a filter group.

6.2 Errors

Errors and warnings can sometimes be logged during the generation of a file system permissions report.

To view these errors, click the **Errors** button in the main window toolbar.

6.3 Exporting

The contents of a file system permissions report can be exported in a number of file formats:

- **XML** - Permissions report data exported as XML can re-loaded (via the Import function) at a later date. All report columns are exported when this format is selected (e.g. you can not select which report types or columns to include).
- **HTML** - Allows report data to be viewed via a web browser. Suitable for exporting limited report data only. Includes template support (see below).
- **Excel** - Exporting in this format creates a MS Excel file with separate tabs for each included report type.
- **PDF** - Portable document format. Excellent for printing and sharing report with limited amounts of data. Exporting large amounts of data to PDF will consume significant memory.
- **CSV** - Exports data as a series of comma-separated text values, with each permissions entry on a separate line. Includes folder permissions data only.

Important: HTML, Excel, and CSV export file formats will not include permissions entries currently hidden via the application of View Filtering. If you find that such reports are missing data elements, please ensure that you disengage view filtering prior to the export process.

Choosing An Export Format

There are a number of important considerations when choosing a data export format. Let's walk through some of the pros and cons of each.

XML exports can be reloaded into Permissions Reporter at a later date, which is very powerful indeed. If you need to export large report data sets and view them later, this is probably the best overall way to do it. They are also excellent for third-party integration (e.g. if you need to consume the data through a custom script, etc.). The downside is that they can be somewhat verbose and must include all report data, so large data sets can use quite a bit of disk space.

HTML exports have the major advantage of being easily accessible via any modern web browser. They can also render their contents in the form of a collapsible tree that is very similar to what's presented in the Permissions Reporter main interface. However, web browsers do not work well with extremely large HTML files - they may be very slow to load or fail to load entirely. HTML exports are suitable only for exporting limited amounts of report data, such as a filtered view or representation of

modestly sized file system nodes. The appearance of HTML export files can be managed via HTML template support (see below).

Excel exports are a great option when you need to manipulate data outside of Permissions Reporter, since Excel offers many powerful data processing features. They segregate report data nicely (e.g. a separate worksheet for the different report types) and tend to be quite user friendly. Downsides are that they require MS Excel (or a third-party spreadsheet application) to use, and have inherent data length limitations (though few reports will exceed them in practice). Also, creating large Excel exports can consume significant system memory (during the export process).

PDF exports are a good choice when you need to share or distribute a limited amount of permissions reporting data, requiring only a PDF viewer to access.

Finally, **CSV** files are easily consumable by many third-party tools (including MS Excel) or custom scripts and are fast to create. However, because they cannot contain sectioned data they are limited to representing folder report data only.

Export Options

- **Include folder report data** - Turn this off if you don't want Folder Report data included in the export.
- **Include file permissions data** - Turn this off if you don't want File Report data to be included in the export.
- **Include owner map report data** - Turn this off if you don't want Owner Map report data to be included in the export.
- **Include share report data** - Turn this off if you don't want Share Report data to be included in the export.
- **Include group membership data** - Use this option to create a separate worksheet (Excel) or table (HTML) containing group membership information.
- **Include event log data** - Allows you to attach the application event log (if available) to your data export.

Folder and File Report Columns

Use the **Report Columns** tab to select which columns should be included in the export file.

Note that XML file type exports will always include all available report data (e.g. all columns). Also, only Folder Report columns are included when exporting to CSV.

Saving and Loading Export Configuration

Use the **Save Export Config** and **Load Export Config** buttons to save and re-load export configuration data, including export options and report column selections.

Export configuration data files can be consumed by the command line interface or the scheduler.

HTML Templates

Permissions Reporter installs "header" and "footer" HTML templates into the Windows common application data area of the file system:

%ProgramData%\Key Metric Software\Permissions Reporter\Templates

These template files are merged into the final output file when exporting to HTML file format, thereby allowing you to alter the appearance of said files. For example, you could add a company logo or header graphic to the "header.html" template file or modify the CSS styles according to your preferences.

6.4 Importing

If you've previously exported file permissions report data to XML file format, you can re-load that data using the **Import** button in the main window toolbar.

To import data, provide a fully qualified XML file path and click the **Import** button. You can also specify which data is imported using the available check boxes.

6.5 Comparing

Permissions Reporter allows two permissions reports to be compared, thus allowing users to identify differences between folder-level permissions.

Report comparison involves several steps, each of which are discussed below.

Importing Data

The first step is to specify source and target report data for comparison.

When specifying file paths, please note that existing report data must be in XML file format. XML is one of the file format options available on when exporting report data.

The source report must be an existing permissions report in XML file format. The target report can either be an existing XML report file or you can elect to use whatever permissions report data is currently loaded into memory (if any).

Upon clicking **Next**, report comparison data will be imported as needed. Please note that this may take some time, especially for larger data sources.

Selecting Comparison Paths

The second step of the report comparison wizard involves selecting the paths you wish to compare.

If existing report data import was successful, you will be presented with two folder trees from which you can select source and target comparison paths.

Important: Most of the time you'll want to select the same paths in the source and target comparison trees in order to produce meaningful comparison results.

You may optionally engage the **Compare all root folders** check box, which will effectively disable the path selection trees and cause all root folders present in the comparison report data to be used as the source and target comparison path(s).

Finally, engage the **Only show differences between reports** option if you only want changes to appear in the final report. Use of this option is recommended, as it produces more concise comparison results in less time.

Upon clicking **Next**, the report data comparison process will begin.

Comparison Results

The final phase of the report comparison wizard allows you to review the report comparison results.

Report comparison results are shown by change type (to facilitate filtering and/or sorting), a path, and a description of what's changed. The follow changes are recognized:

- Folder added
- Folder removed
- Folder inheritance added
- Folder inheritance removed
- Folder owner changed
- Permission not changed
- Permission added
- Permission removed

If you choose not to engage the **Only show differences between reports** option, then the comparison report will also include:

- Folder not changed
- Permissions not changed

All of the above comparison results will also include a textual description of the change in question.

You can optionally export the comparison results to CSV (.csv) or MS Excel (.xlsx) file format.

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