Tzunami Deployer
Hummingbird DM Exporter Guide

Supports migration of Hummingbird DM enterprise contents repositories into Microsoft SharePoint using Tzunami Deployer

Version 4.0
Last Updated: January 25, 2024

Table of Contents

List of Tables

List of Figures

PREFACE

This guide provides installation procedures for Tzunami Hummingbird DM Exporter and detail steps to extract contents from Hummingbird DM Drive using Tzunami Hummingbird DM Exporter. The guide also describes how to extract contents non-interactive way using command-line instructions and best practice.

This preface contains the following topics.

- Intended Audience

- Conventions

- Technical Support

- Comments and Suggestions

INTENDED AUDIENCE

Tzunami Hummingbird DM Exporter Guide is intended for:

- System Administrators who are responsible for exporting Hummingbird DM Document contents and setting migration environment using Tzunami Deployer.

- Project Managers and IT Managers who create and regulate usage of Tzunami Deployer and Tzunami Hummingbird DM Exporter.

CONVENTIONS

The following text conventions are used in this document:

- Commands and keywords are given in **boldface**
- Terminal sessions, console screens, or system file names are displayed in `fixed width fonts`

Caution indicates that the described action might result in program malfunction or data loss.

Notes contain helpful suggestions about or references to materials not contained in this manual.

Tips provide information that might help you solve a problem.

TECHNICAL SUPPORT

Before contacting Tzunami Support team, ensure that you are referencing the latest copy of this user guide (Ctrl+Click to follow link) ***Tzunami Deployer Hummingbird DM Exporter Guide.***

For additional information, please contact Tzunami Support Team at ***support@tzunami.com***

COMMENTS AND SUGGESTIONS

Your feedback is important to us and will help us to provide the most accurate and high quality information possible in our documentation. Send us comments or suggestions by email to ***support@tzunami.com***. Be sure to include as much of the following as possible:

- The document title.
- The location that the document was accessed from (either downloaded from Tzunami web site or the Tzunami Deployer User Guide and Tzunami Hummingbird DM Exporter Guide available in Tzunami Deployer).
- The section or chapter number and the original text found in the document.

When you send information to Tzunami Deployer, you grant Tzunami a non-exclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

1 INSTALLING TZUNAMI HUMMINGBIRD DM EXPORTER

This chapter contains information about installing Tzunami Hummingbird DM Exporter. It contains the following topics:

- *System Requirements*
- *Installing Tzunami Hummingbird DM Exporter*
- *Uninstall Tzunami Hummingbird DM Exporter*

1.1 SYSTEM REQUIREMENTS

The following requirements must be met in order to use Tzunami Hummingbird DM Exporter:

Table 1-1: System Requirements

Components	Minimum Requirements
Computer and processor	2GHz Pentium processor or equivalent
Memory	2 GB (Minimum); 4GB (Recommended)
Hard disk	50Mb (additional space will be required for the Tzunami Deployer projects, which size may vary from 10 Mb to 4 GB).
Supported Operating System	Windows Server 2000/2003/2008/2012, Windows XP, Windows Vista & Windows 7, Windows 8 & Windows 10.
Supported Architectures	x86 and x64
Network	Intranet/Internet access depending on connectivity requirements
Display	800 x 600, 256 colors (minimum); 1024 x 768 high color, 32-bit (recommended)
Microsoft .NET Framework	Microsoft .Net Framework 2.0
Additional Requirements	Hummingbird DM server configured and running. Windows Explorer DM Extension

1.2 INSTALLING TZUNAMI HUMMINGBIRD DM EXPORTER

Tzunami Hummingbird DM Exporter requires that the Windows Explorer DM Extension to be installed and configured on the machine where the exporter is running.

To install Tzunami Hummingbird DM Exporter:

1. Unzip the zip file, and run `TzunamiHummingbirdDMExporter.msi`. The Tzunami Hummingbird DM Exporter setup wizard (Welcome window) will launch. To advance through the install wizard, click **Next** on the bottom of the window.
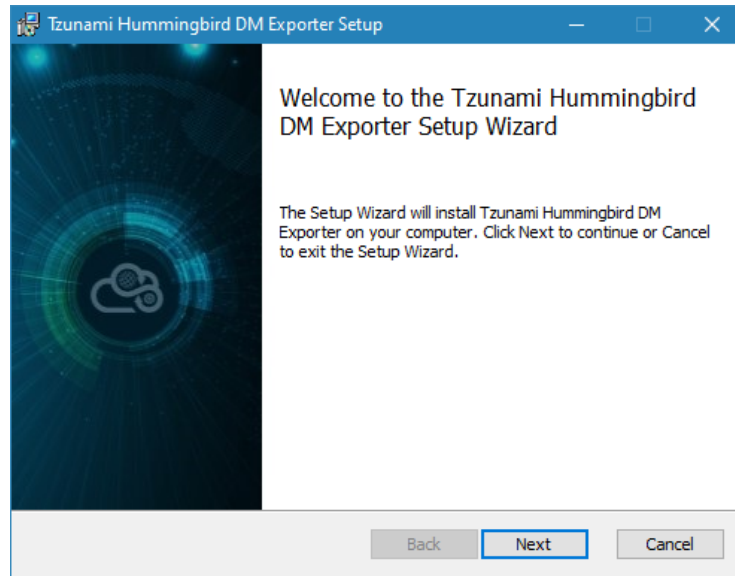
Figure 1-1: Welcome Window

2. In the End-User Licensing Agreement panel, click "**I accept the terms in the License Agreement**" and click **Next** to continue installation.
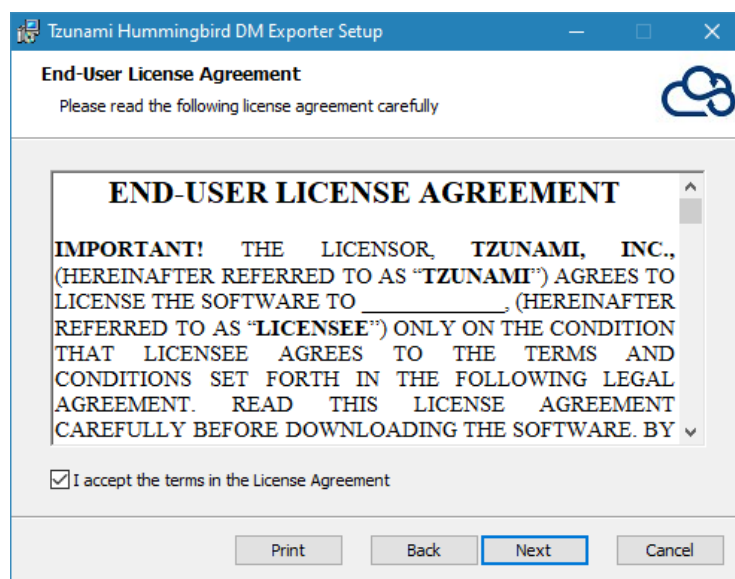
Figure 1-2: End-User Licensing Agreement

You are advised to read the terms of the license carefully before proceeding with the installation. If you decline the license terms, the installation cannot proceed.

3. In the Custom Setup panel, do one of the following:

    •   To accept the default Destination Folder, click **Next**.

    •   Click **Browse**, locate and select a destination folder, click **OK,** and then click **Next**.

Figure 1-3: Custom Setup Window

4. In the Ready to install Tzunami Hummingbird DM Exporter panel, click **Install**.
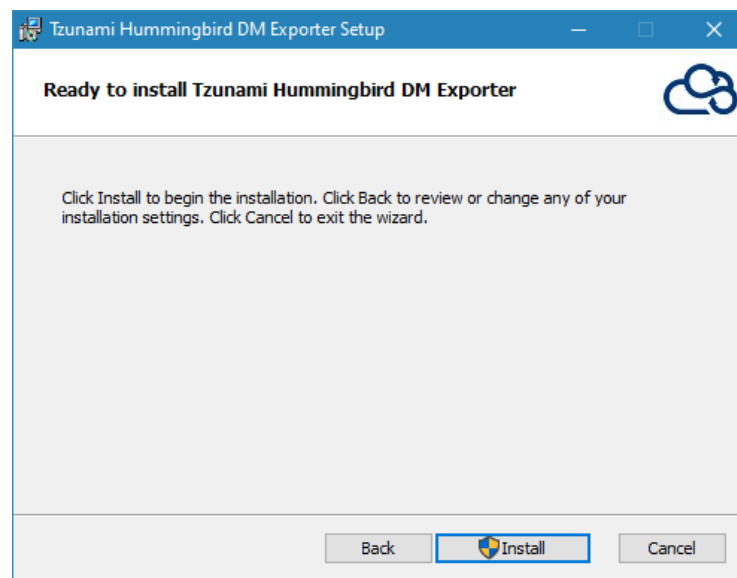
Figure 1-4: Installing Tzunami Hummingbird DM Export Window

5. In the Completed Tzunami Hummingbird DM Exporter Setup Wizard, to exit the wizard, click **Finish**.
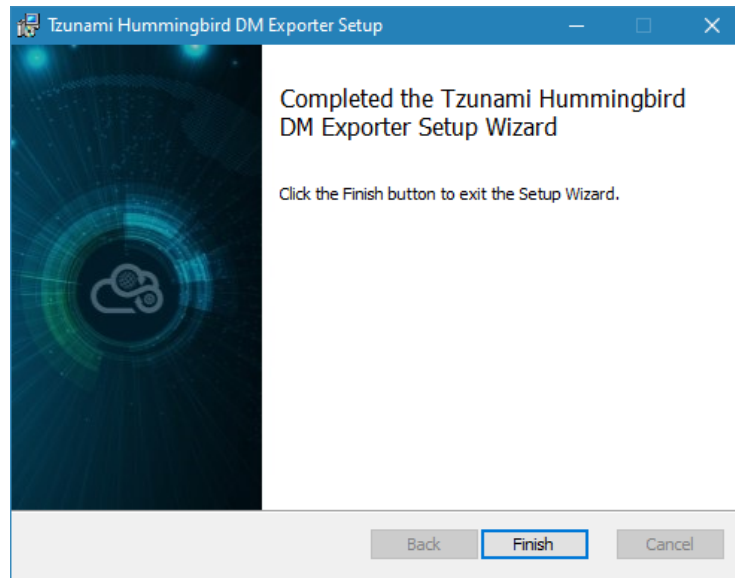
Figure 1-5: Installation Complete Window

When Tzunami Hummingbird DM Exporter is installed, it comes with a default license that can be used for evaluation purpose only. This license is limited in time and number of operations.

1.3 CONFIGURATION OF TZUNAMI SERVICE SETTINGS
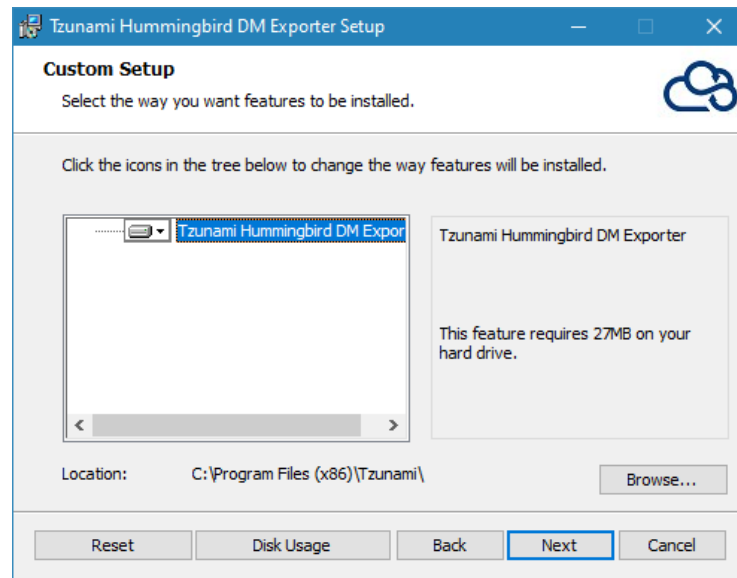
1. When installing **Tzunami Deployer/Exporter/Remote Service** for the first time, a **Tzunami Service Settings** dialog is displayed. In **Tzunami Service Settings,** the Licensing Service, Link Resolver Service and O365 AD Service are pointed to localhost (same machine).
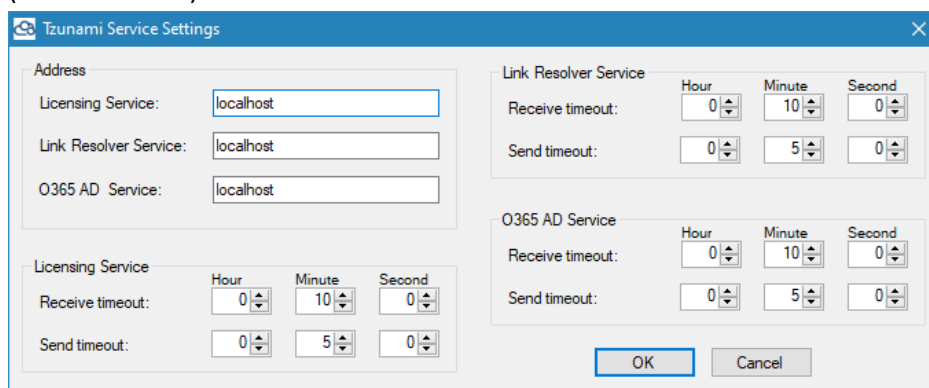
Figure 1-6 Deployer Settings Manager

User can run the **Settings Manager.exe** application from the installation directory to display this service settings dialog at any time and updated the settings to point the Tzunami services as required.

In case of Remote Service installation, restart the Tzunami Remote Service after updating the Tzunami Service Settings.

If these services are installed in other machine, point to that machine with machine name or IP Address.

2. Click on **OK**.

1.4 UNINSTALL TZUNAMI HUMMINGBIRD DM EXPORTER

This section of the guide illustrates different ways to remove or uninstall Tzunami Hummingbird DM Exporter from your Hummingbird DM Server. Here are the two different ways to uninstall Tzunami Hummingbird DM Exporters:

- Uninstallation using Installer
- Uninstallation using Control Panel

To uninstall Tzunami Hummingbird DM Exporter, user needs to be a Local Administrator in the Tzunami Hummingbird DM Exporter installed machine. Uninstalling Tzunami Hummingbird DM Exporter is simple and easy. You can remove or uninstall it in no time. You don't need to reboot your computer once the uninstalling process is complete.

> Log files, licensing information files etc. will remain after uninstalling Tzunami Hummingbird DM Exporter. You can manually delete those files from your computer if needed. By default logs are located at the "C:\Program Files\Tzunami\Deployer 4.0\Exporter\Logs", or where Tzunami Hummingbird DM Exporter is installed. Tzunami Hummingbird DM Exporter Options information will be available in "C:\Documents and Settings\All users\Application Data\Local\Tzunami" location.

1.4.1 Uninstallation using Installer

To uninstall Tzunami Hummingbird DM Exporter using Installer

1. Close **Tzunami Hummingbird DM Exporter**.
2. Unzip the zip file, and run `TzunamiHummingbirdDMExporter.msi`. The Tzunami Hummingbird DM setup wizard (Welcome window) will launch. To advance through the remove installation wizard, click "**Next"** at the bottom of the screen.
3. In the Change, repair or remove installation panel, click "**Remove**" button to proceed to remove Tzunami Hummingbird DM Exporter from your computer.
4. In the Ready to remove Tzunami Hummingbird DM Exporter panel, click "**Remove"** to remove Tzunami Hummingbird DM Exporter from your computer.
5. Click **Finish** to exit the setup wizard.

> You can right-click Tzunami Hummingbird DM Exporter setup (`TzunamiHummingbirdDMExporter.msi`) file and select **Uninstall** to remove or uninstall Tzunami Hummingbird DM Exporter from your computer.

1.4.2 Uninstallation using Control Panel

1. Close **Tzunami Hummingbird DM Exporter.**
2. Click **Start** > **Control Panel** > **Add or Remove Programs**.
3. In Add or Remove Programs window, right-click the Tzunami Hummingbird DM Exporter application you want to remove, and then click **Uninstall**.

2 TZUNAMI HUMMINGBIRD DM EXPORTER

This chapter contains information about Tzunami Hummingbird DM Exporter. It contains the following topics:

Overview

Exporting from Hummingbird DM

Command-line Export

Logging settings

Best Practice

2.1 OVERVIEW

Hummingbird DM Exporter enables migrating Hummingbird DM content into SharePoint 2007, SharePoint 2010, SharePoint 2013, SharePoint 2016, SharePoint 2019 or SharePoint Online using Tzunami Deployer.

To load Hummingbird DM content into Tzunami Deployer, you must first extract the content, using Hummingbird DM Exporter, into TDX (Tzunami Deployer Export) and STDX (Separate Tzunami Deployer Export) files. You can then load this TDX file into a Deployer project.

When working with Tzunami Deployer on several machines, you can run an export on one machine and load the exported data on another.

Tzunami Hummingbird DM Exporter is an extension module of Tzunami Deployer. You can work with this module independently of Tzunami Deployer. See Tzunami Deployer User Guide for more details about Tzunami Deployer.

2.1.1 Supported Types

The following items are exported from :

- Workspaces
- Personal Workspace
- Libraries
- Quick Searches Folders
- Search Folders

- Public Folders
- Projects
- Documents
- Orphan Documents
- Record Management

You can also export custom objects from Hummingbird DM.

2.1.2 Security

In addition to the structure and items, Tzunami Hummingbird DM Exporter extracts security information. The following permissions are used in the exporter:

- Control Access
- Copy
- Delete
- Edit Content
- Edit Profile

- Retrieve Document
- View Document
- View Profile
- View Published Only

Each item is assigned an ACL defining the permissions of the various members according to the roles they were assigned.

The exporter automatically creates four default roles that are used during the deployment process. The roles include View Profile (View Profile permission), Read Only (View Profile, View Document, Retrieve Document and Copy permissions),

Normal Access (View Profile, View Document, Retrieve Document, Copy, Edit Profile and Edit Content permissions), and Full Access (user has full permissions).

2.1.3 Credentials

The exporter requires the credentials of an administrator account in order to correctly export content.

2.2 EXPORTING FROM HUMMINGBIRD DM

The Tzunami Hummingbird DM Exporter enables you to export Hummingbird DM document contents to a TDX file.

When exporting, keep the following in mind:

Export in small chunks: When exporting from your source system, perform the export in small chunks of about 40K-50K files each that have a common business logic or some other logic.

Ensure consistency: Make sure that the content of the different exports does not overlap and that, while exporting, no changes are made to the source data.

To export to a TDX file:

1. In Tzunami Deployer, right-click in the Hummingbird DM tab source store area and select **Export Hummingbird DM to TDX**.

   Or

   Click **Start > All Programs > Tzunami > Tzunami Hummingbird DM Exporter**.

   The Welcome screen of the Export Wizard appears.

2. Click **Next**. The Hummingbird DM Configurations screen appears. Use this screen to enter the settings required for the exporter to connect to Hummingbird DM. Enter the information required for connecting to the Hummingbird DM server.

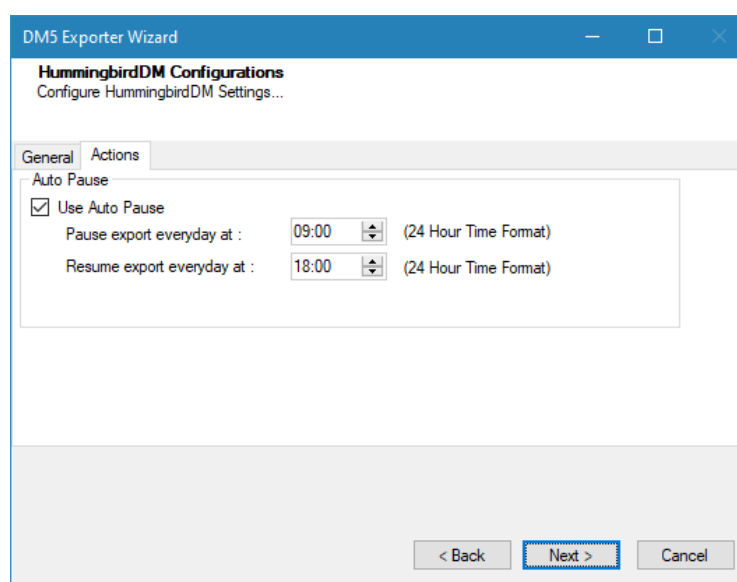**Figure 2-1: Hummingbird DM Configurations Screen – Connection Tab**

Table 2-1: Hummingbird DM Configurations, Web Settings Tab – Description of Fields

Field	Description
Username	Enter the username for the Hummingbird DM user account
Password	Enter the password for the account specified in **Username**
Remember password	Check this option if you wish to save your password for next login
Library Name	Select the Library to connect to in order to perform the export. Click **Refresh** to view the list of available Libraries.
Server Time	Select the time zone of the Hummingbird DM server.
Export versions	Check this option if you wish to export all versions of items. If you do not check this option, only the latest version of each item is exported.
Export duplicate items only on first location	An item in Hummingbird DM can be located in more than one folder, but SharePoint does not support this behavior. Specify whether to export such an item only once (in the first location it appears), or to duplicate it in each location in which it appears.
Export security	Check this option if you wish to export the security settings of items.

3. Click on Actions tab

   The **Actions** tab allows you to use different actions that can be taken in the exporter.

   - **Auto Pause:** The export process is paused and resumed using this functionality at a set time each day. The feature can be turned on or off using the **Use Auto Pause** check box. The feature can be checked by the user, who can also select the pause and resume times. The user can deselect it to turn off the feature.

Figure 2-2: Hummingbird DM Configurations Screen – Actions Tab

Table 2-2: Hummingbird DM Configurations, Actions Tab - Description of fields

Field	Description
Auto Pause	
Use Auto Pause	To use the auto-pause and resume feature, select this option. To turn off this function, uncheck this box.
Pause export every day at	Set the daily time that the export process should pause.
Resume export every day at	Set the daily time for restarting the interrupted export operation.

The settings for actions are only applied to this exporter instance that is currently executing when the user clicks the **Next** button.

4.   Click **Next**. The Folders screen appears.

Tzunami Exporter provides quick analysis option before exporting to know the size, count of contents inside selected folder.

If you want to analyze the content: Check on the Folder(s) in tree view, then **Analyze** button is enabled. Click **Analyze**.
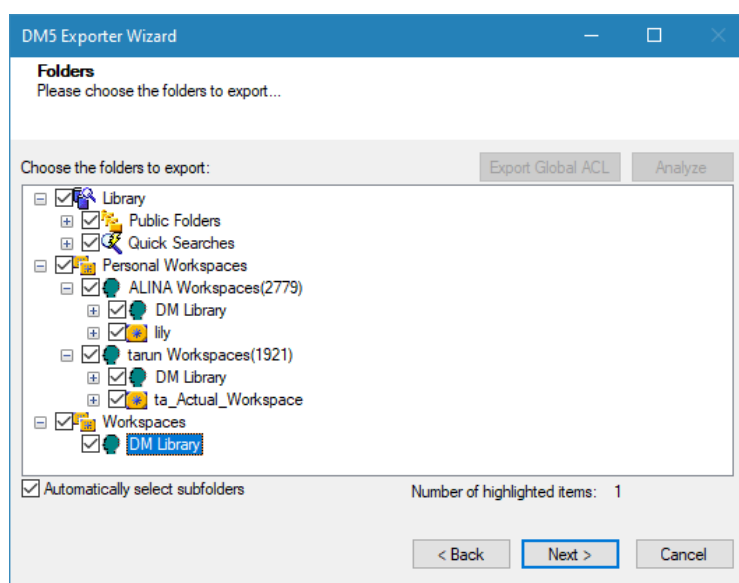
Figure 2-3 Analyze Option

Analyzer screen appears. Analyzer screen provides the detail information that helps to plan for the export (chunk size) based on File size and number of items.
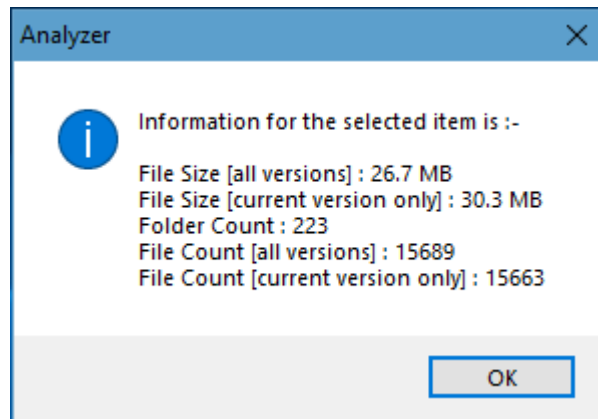
Figure 2-4 Analyzer Information

Table 2-3 Analyzer Information Description

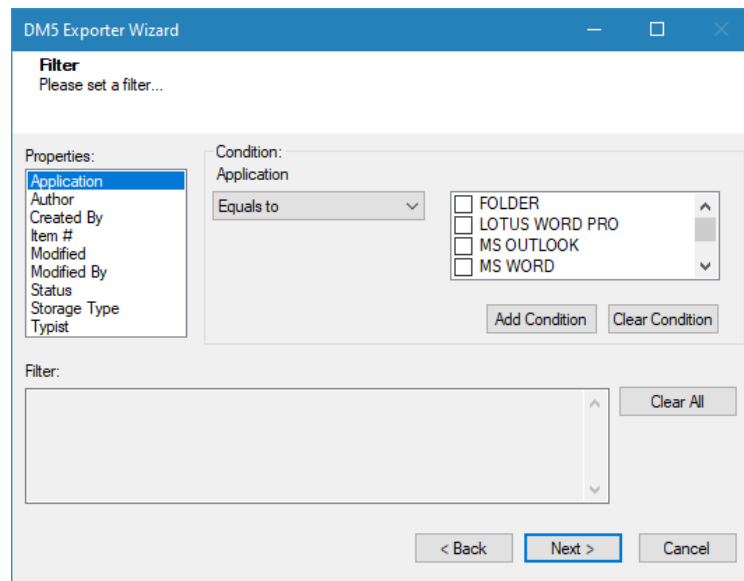| Field	Description
File Size [all versions]	Provides the total size of files for all versions of documents.
File Size [current version only]	Provides the total size of files for current version of documents.
Folder Count	Provides the number of folders.
File Count [all versions]	Provides the total number of files for all versions of documents.
File Count [current version only]	Provides the total number of files for current versions of documents.

5. Select folders to export.
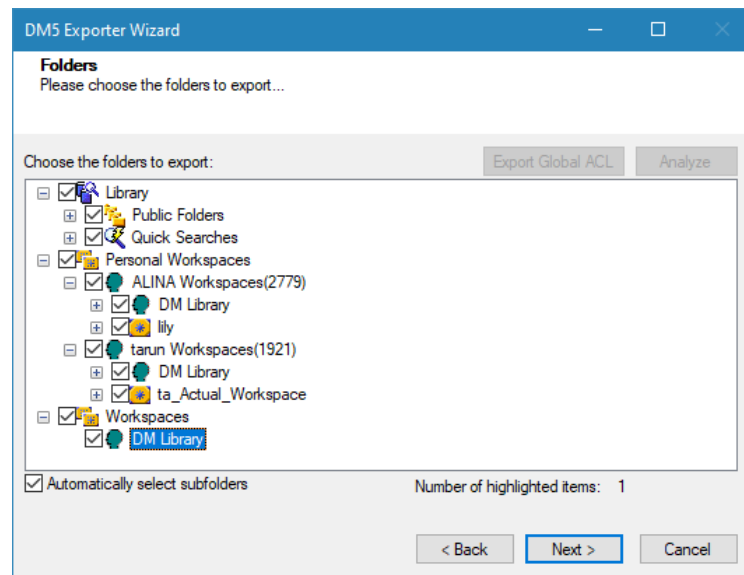
Figure 2-5: Folders Selection Screen

You can select all subfolders of a selected folder by checking '**Automatically select subfolders**'.

6. Click **Next**. The Filter screen appears.

Figure 2-6: Filter Screen

7. Set up filtering as follows:

   a) In the Properties field, select a property.

   b) In the Condition field, select a condition from the dropdown list and enter or select values in the corresponding field.

   c) Click **Add Condition**. The condition is added to the Filter area, displaying the full filter expression.

You can add custom filtering properties in the Filter screen. For more information about adding custom filtering properties, see, *How to add custom filter properties in Tzunami Hummingbird DM Exporter?* on page **3-12**

You can only add one condition per property.

You can edit a condition for a property by selecting the property and modifying the condition type or values that are currently assigned to it.

You can remove a condition from a property or all the conditions from all the properties by clicking **Clear Condition** or **Clear All**, respectively.

This option works only for Data Items.

If multiple conditions are applied, only items that match all conditions are exported.

8. Click **Next**. The Destination Folder screen appears.
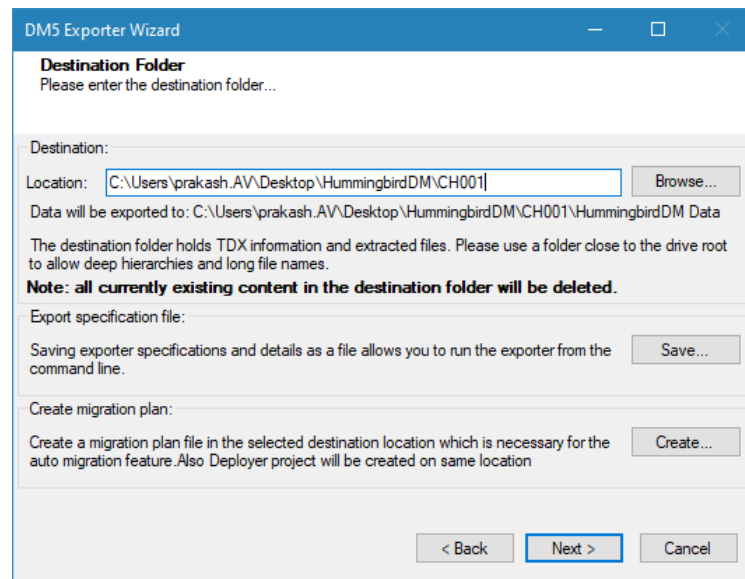
Figure 2-7: Destination Folder Screen

Specify where to export the files and generated TDX information. Make sure you are saving to a folder with a descriptive name and under a well-organized file system hierarchy. It is recommended to export to a folder that is as close to the root as possible.

When exporting deep hierarchy, the property which store the path for exported folder/files may exceed the maximum character supported by the property (typically 260 characters defined in the Windows API). To overcome such condition, it is recommended to export to a folder that is as close to the root as possible.

Starting in Windows 10, version 1607, MAX_PATH limitations have been removed from common Win32 file and directory functions. Please, refer information published by Microsoft from following link and consult with your system administrator to remove the limitation whenever possible.

https://docs.microsoft.com/en-us/windows/win32/fileio/maximum-file-path-limitation?tabs=registry

Click **Save** under **Export specification file** for saving export specification details as an XML file which can be used to run the exporter in command-line mode.

9. Click **Next**.

If the export folder already exists, a warning appears, informing you that the destination folder already exists and if you continue all existing information will be deleted.

Clicking **OK** confirms overwrite and clicking **Cancel** returns you to the Destination Folder screen to change the destination folder.

An Exporting screen appears with a progress bar and execution report, and the export process begins. During the export process, a **Pause** button is displayed. Users

can manually pause and resume the export process (despite of scheduled pause/resume time) by clicking on **Pause/Resume** button.
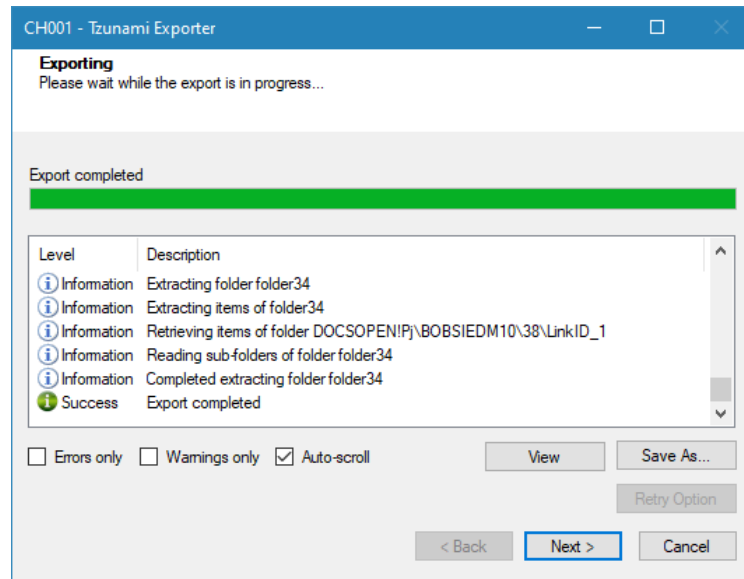
Figure 2-8: Exporter Progress Screen

You can save the export report by clicking **Save As…** after the export is complete.

You can check **Auto-scroll** to display the latest progress messages, as they appear

You can display only export errors by checking **Errors only**.

You can display only export warnings by checking **Warnings only**.

10. Click **Retry Option**, if there are failed item(s).

11. Click **Next**. The Export Complete screen appears.

12. Click **Done**. The Tzunami Hummingbird DM Exporter wizard is closed.

After the extraction process completes successfully, you are prompted to load the exported data into the current Tzunami Deployer project. Clicking '**Yes'** begins the process of loading the content from the previously exported TDX file into the project. For more information about loading sources, refer to the *Tzunami Deployer User Guide*.

2.3 COMMAND-LINE EXPORT

Tzunami Exporter for Hummingbird DM provides ability to run export sessions non-interactively using command line instructions. This allows administrators to plan and schedule long running migration jobs through scripts, batch files and schedulers according to needs and organizational timetables. To run the exporter in batch mode you will need exporter specification file explained in the 'Choose Destination Folder' step of the export wizard. The file contains all the export option details including:

- Source ECM connectivity information (Server Address, User Name, Password etc.)
- Items to export
- Destination and Log Folder
- Filter
- Exporter specific options

This file can be edited to suit your needs however the XML schema of the file should not be altered. It is recommended that you generate a sample specifications file in the Destination Folder Screen selection step of the export wizard and use it as a template to create your own specification file.

Once the specification file is ready, you can run the exporter from command line using command:

TzunamiExporter.exe [-r *<ResultFile>*] -s *<ExportSpecificationsFile>*

Usage

| Field	Description
-r	Outputs export results into an XML file [Optional]
-s	XML file containing export specifications

For example:

C:\User\Administrator> "C:\Program Files (x86)\Tzunami\Deployer 4.0\Exporters\Hummingbird DM \TzunamiExporter.exe" -s "D:\Spec Files\specs1.xml"

C:\Program Files (x86)\Tzunami\Deployer 4.0\Exporters\Hummingbid DM> TzunamiExporter.exe -s "D:\Spec Files\specs1.xml"

Based on your needs you can create number of specification files and use them to run multiple export sessions as batch commands.

You will need to provide absolute path for **TzunamiExporter.exe** and *ExportSpecificationsFile* in the command if you are not running from the exporter installation directory.

In Microsoft Windows 7, Windows Vista, Windows Server 2003 and Windows Server 2008/2012 environment, if USG (Universal Security Group) is enabled, Users with low privileges sometimes cannot export ECM contents. To export contents using command line, User must run with elevated or administrative privileges.

To export contents with elevated or administrative privileges, you can run the exporter from command line using command:

RUNAS /trustlevel:"Unrestricted" "<ExporterInstallationDirectory>\TzunamiExporter.exe" –s "<Spec file path>\Specfilename.xml "

For example:

RUNAS /trustlevel:"Unrestricted" "C:\Program Files (x86)\Tzunami\Deployer 4.0\Exporters\Hummingbird DM\TzunamiExporter.exe" -s "D:\Spec Files\specs1.xml "

2.4 LOGGING SETTINGS

In Tzunami Exporter, log is written in a persistent medium having as much information as possible about events that occur while the software runs. That information plays a vital role while diagnosing if any issue occurs during the export process. Hence, it is worth mentioning that logger writes each and very details during.

Tzunami Inc provides the settings for writing logs. There are the following log levels that the user can change before running the tool.

1. Go to installation directory of the exporter and open **TzunamiExporter.exe.config** file in an editor.

2. Locate the key and set corresponding values as mentioned below:

   - **LogLevel:** Set the esteem to "Debug" or "High" or "Normal" or "low" or "none".
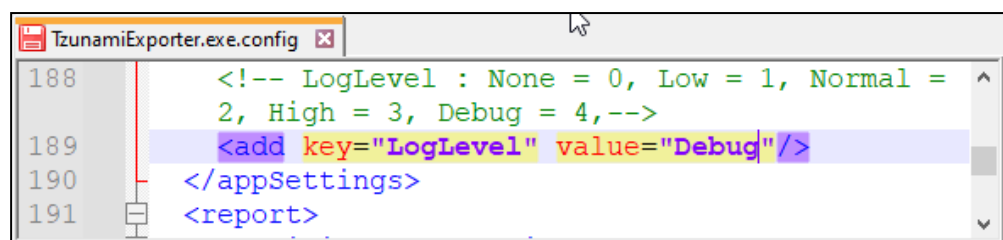
Figure 2-9 Log level Settings

   - **Debug:** Writes logs as much as possible. So, this setting includes the maximum level of verbosity. By default, the tool is packaged with this setting.

   - **High:** Writes logs as much as possible for warnings and errors. However, it will not log possible diagnostic information.

   - **Normal:** Writes logs for anticipated errors and warnings.

- **Low:** Critical errors are logged. There will be as low as possible information logged.

- **None:** No such logs are written.

3. Save the file. Then run the exporter.

2.5 BEST PRACTICE

Due to the technological differences between and SharePoint, the following best practices should be taken into consideration:

- Migrate folders to their relative list types, based on the items in those folders.

Table 2-4: Target Structure Guidelines

Hummingbird DM Item Type	Relevant SharePoint Types
Workspace, Library, Search Folder	• Site Collection • Site
Public Folder	• Site Collection • Site • Document Library • Folder inside a Document Library
Document	Document inside a Document Library.

- Profile properties/columns can be added to the items as part of the deployment. For more information about adding attributes, refer to the **Tzunami Deployer User Guide**.

- Top-level folders should be deployed as sites and sub-sites, in order to better organize the content in a SharePoint-oriented structure.

3 ANNEX

3.1 HOW TO ADD CUSTOM FILTER PROPERTIES IN TZUNAMI HUMMINGBIRD DM EXPORTER?

You can add custom filter properties in the Tzunami Hummingbird DM Exporter using Tzunami Hummingbird DM Exporter configuration file (`TzunamiExporter.exe.config`). A flag '*CustomFilterPropertySection*' has been added in the configuration file which allows to add custom filtering properties in the Tzunami Hummingbird DM Exporter.

To add custom filter properties

1. Open the Exporter configuration file (`TzunamiExporter.exe.config`). The exporter configuration file is located at "`C:\Program Files\Tzunami\Deployer 4.0\Exporters\DM5`" or where Tzunami Hummingbird DM Exporter is installed.

2. In the '*CustomFilterPropertySection*' flag, add the property to include in filter screen.

Figure 3-1 Custom Filter Property Settings

Export a small content from Tzunami Hummingbird Exporter and refer to TDX file to find properties that you want to add as custom filtering properties.

Figure 3-2 Custom Property in TDX file

For Short Text, Long Text, User type properties:

```
<Property        id="property_id"        title="property_title"        type=
"Property_type"/>
```

For Choice type property

```
<Property id="property_id" title="property_title" type= "Choice">
      <choices>
            <choice value="… "></choice>
            <choice value="… "></choice>
      </choices>
```
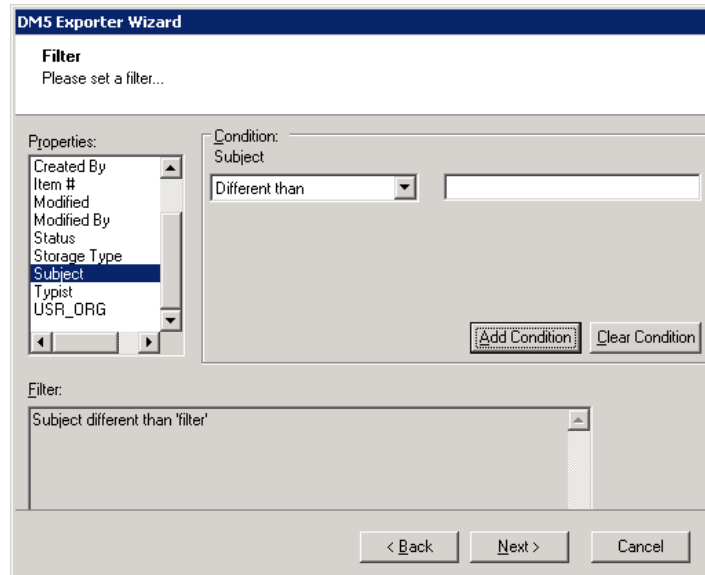
```
</property>
```

3. Save the configuration file. The added custom filtering properties will be available in the Filtering Screen.

Figure 3-3 Custom Property in Filter Screen

4 COPYRIGHT AND TRADEMARK

For further information, you can contact Tzunami Inc. at:

Tzunami Inc.

601 108th Avenue, NE

Suite 1900

Bellevue, WA 98004, USA

Email: sales@tzunami.com, support@tzunami.com

Web: http://www.tzunami.com