# Table of Contents

**PREFACE** .................................................................................................................. IV  
**INTENDED AUDIENCE** ............................................................................................. IV  
**STRUCTURE** ............................................................................................................... IV  
**CONVENTIONS** .......................................................................................................... IV  
**TECHNICAL SUPPORT** .............................................................................................. V  
**COMMENTS AND SUGGESTIONS** .............................................................................. V  

## 1 PRE-REQUISITES FOR INSTALLING TZUNAMI DEPLOYER ........................................ 1-1

1.1 **SYSTEM REQUIREMENTS** .................................................................................... 1-2  
1.2 **SOFTWARE REQUIREMENTS** .............................................................................. 1-2  
1.3 **NETWORK REQUIREMENTS** .............................................................................. 1-3  
  1.3.1 Communication between Tzunami Deployer and Tzunami Deployer Remote Service .... 1-3  
  1.3.2 Communication between Tzunami Link Resolver Service and Tzunami Deployer/Tzunami Deployer Remote Service .............................................................. 1-3  
  1.3.3 Communication between client machine and SPS2003/WSS2.0 Server ................. 1-3  
1.4 **PERMISSION REQUIREMENTS** ........................................................................... 1-4  
  1.4.1 Tzunami Deployer ................................................................................................. 1-4  
  1.4.1.1 Connecting to SharePoint Web Front End Server .............................................. 1-4  
  1.4.1.2 Connecting to SharePoint Online ...................................................................... 1-4  
  1.4.1.3 Connecting to SPS2003/WSS2.0 ...................................................................... 1-5  
  1.4.2 Tzunami Deployer Remote Service ...................................................................... 1-5  
  1.4.2.1 Connecting to SharePoint Web Front-End servers .......................................... 1-5  

## 2 INSTALLING TZUNAMI DEPLOYER AND SERVICE COMPONENTS ............................. 2-7

2.1 **INSTALLING TZUNAMI DEPLOYER** .................................................................... 2-8  
2.2 **INSTALLING TZUNAMI DEPLOYER SERVICE COMPONENTS** ............................ 2-11  
  2.2.1 Tzunami Deployer Licensing Service ................................................................... 2-11  
  2.2.2 Tzunami Deployer Remote Service ..................................................................... 2-11  
  2.2.2.1 Installing Tzunami Deployer Remote Service .................................................. 2-11  
  2.2.2.2 Changing Tzunami Deployer Remote Service Credentials .............................. 2-16  
  2.2.3 Tzunami Link Resolver Service ........................................................................... 2-17  
  2.2.3.1 Installing Tzunami Link Resolver Service ......................................................... 2-18  
  2.2.3.2 Configuring Tzunami Link Resolver Service to communicate with Tzunami Remote Service ................................................................. 2-21  
  2.2.3.3 Configuring Tzunami Link Resolver Service to communicate with Tzunami Deployer ............................................................. 2-21  
2.3 **UNINSTALL TZUNAMI DEPLOYER AND SERVICE COMPONENTS** .................. 2-22  
  2.3.1 Uninstallation using Installer .............................................................................. 2-23  
  2.3.2 Uninstallation using Control Panel .................................................................... 2-23  
  2.3.3 Uninstallation using shortcuts ............................................................................ 2-23  

## 3 LICENSING INFORMATION .......................................................................................... 3-24

## 4 COPYRIGHT AND TRADEMARK ................................................................................. 4-25
List of Tables

Table 1-1: Hardware Requirements ................................................................. 1-2
Table 1-2: Communication between Tzunami Deployer and Tzunami Remote Service .......... 1-3
Table 1-3: Communication between LRS and Tzunami Deployer/RS .................................. 1-3
Table 1-4: Communication between Client Machine and SPS2003/WSS2.0 Server ................. 1-4
Table 1-5: SharePoint Online Permissions ...................................................................... 1-4
Table 1-6: SharePoint Portal Server 2003 Permissions ..................................................... 1-5
Table 2-1: Remote Service Settings .............................................................................. 2-15
Table 2-2: Deployer Settings ......................................................................................... 2-22

List of Figures

Figure 2-1: Welcome Window ................................................................................. 2-8
Figure 2-2: End-User Licensing Agreement Window ..................................................... 2-9
Figure 2-3: Custom Setup Window .............................................................................. 2-9
Figure 2-4: Installing Tzunami Deployer ...................................................................... 2-10
Figure 2-5: Installation Complete Window ................................................................. 2-10
Figure 2-6: Welcome Window .................................................................................... 2-12
Figure 2-7: End-User Licensing Agreement Window ..................................................... 2-12
Figure 2-8: Custom Setup Window .............................................................................. 2-13
Figure 2-9: Service Account Window ............................................................................ 2-13
Figure 2-10: Installing Tzunami Deployer ServiceComponents ......................................... 2-14
Figure 2-11: Installation Complete Window .................................................................. 2-14
Figure 2-12: Remote Service Setting Window ............................................................. 2-15
Figure 2-13: Tzunami Deployer Remote Service Properties Window ................................ 2-16
Figure 2-14: Tzunami Link Resolver Service Architecture .............................................. 2-17
Figure 2-15: Welcome Window ................................................................................. 2-18
Figure 2-16: End-User Licensing Agreement Window ..................................................... 2-19
Figure 2-17: Custom Setup Window .............................................................................. 2-19
Figure 2-18: Installing Tzunami Deployer Link Resolver Service ....................................... 2-20
Figure 2-19: Installation Complete Window .................................................................. 2-20
Figure 2-20: Deployer Settings Window ....................................................................... 2-21
PREFACE

This preface provides the following information about this Tzunami Deployer Installation Guide:

- Intended Audience
- Structure
- Conventions
- Technical Support
- Comments and Suggestions

INTENDED AUDIENCE

This information is intended for:

- System Administrators who are responsible for setting migration environment using Tzunami Deployer.
- Project Managers and IT Managers who create and regulate usage of Tzunami Deployer, Tzunami Deployer Remote Service and Tzunami Link Resolver Service.

STRUCTURE

This Tzunami Deployer Installation Guide is organized as follows:

- **Preface** contains the overview of this manual.
- **Chapter 1 “Prerequisites for Installing Tzunami Deployer”** details the minimum system requirements, network requirements and permission requirements to install Tzunami Deployer.
- **Chapter 2 “Installing Tzunami Deployer and Service Components”** contains installation and configuration instructions for Tzunami Deployer, Tzunami Deployer Remote Service and Tzunami Link Resolver Service.

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

If you have searched our reference materials and the issue still persists, contact Tzunami Deployer 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 Deployer Installation Guide available in Tzunami Deployer).
- The section or chapter number and the original text found in the document.

When you send information to Tzunami Support Team, 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 PRE-REQUISITES FOR INSTALLING TZUNAMI DEPLOYER

This chapter outlines the necessary software, network and security prerequisites needed to install Tzunami Deployer. It contains the following topics:

- System Requirements
- Software Requirements
- Network Requirements
- Permission Requirements
1.1 SYSTEM REQUIREMENTS

The following table lists the system requirements for Tzunami Deployer and Deployer Service Components.

Table 1-1: Hardware Requirements

<table>
<thead>
<tr>
<th>Components</th>
<th>Minimum Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and processor</td>
<td>2GHz Pentium processor or equivalent</td>
</tr>
<tr>
<td>Memory</td>
<td>2 GB (Minimum); 4GB (Recommended)</td>
</tr>
<tr>
<td>Hard disk</td>
<td>80Mb (additional space will be required for the Tzunami Deployer projects, which may vary from 10 Mb to 20 GB).</td>
</tr>
<tr>
<td>Supported Architectures</td>
<td>x86 and x64</td>
</tr>
<tr>
<td>Network</td>
<td>Intranet/Internet access depending on connectivity requirements</td>
</tr>
<tr>
<td>Display</td>
<td>800 x 600, 256 colors (Minimum); 1024 x 768 high color, 32-bit (Recommended)</td>
</tr>
</tbody>
</table>

Microsoft .NET Framework

Microsoft .NET Framework 4.5
You can download Microsoft .NET Framework 4.5 from:

Microsoft .NET Framework 4.0
You can download Microsoft .NET Framework 4.0 from:

Microsoft .NET Framework 3.5 (including 3.0 and 2.0)
You can download Microsoft .NET Framework 3.5 SP1 from:

1.2 SOFTWARE REQUIREMENTS

The following applications are required for Tzunami Deployer for SharePoint Online.

- Microsoft Online Service Sign-in Assistant
- Microsoft Azure Active Directory Module for Windows PowerShell
1.3 **NETWORK REQUIREMENTS**

Some services on the SharePoint Server must be enabled to run Tzunami Deployer smoothly. You must run following Windows Services on the SharePoint Server:

- Remote Registry
- Computer Browser
- Server

You must enable File and Printer Sharing for Microsoft Networks for all network connections used during communications between Deployer and the SharePoint Server to which Deployer connects.

You must disable Proxy Authentication even if it has exceptions set for local addresses or the SharePoint Server address specifically. If you wish to use Deployer to connect to a SharePoint farm through a Proxy Server, you must make certain specific configuration changes. Please contact Tzunami Support Team at support@tzunami.com for more information.

1.3.1 **Communication between Tzunami Deployer and Tzunami Deployer Remote Service**

The following table lists the ports that should be open for communication between Tzunami Deployer (client machine) and Tzunami Deployer Remote Service, which is installed on SharePoint Web Front-End servers.

<table>
<thead>
<tr>
<th>Service/Application</th>
<th>Function</th>
<th>Ports</th>
<th>Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tzunami Deployer</td>
<td>Tzunami Deployer</td>
<td>10028</td>
<td>NET.TCP</td>
</tr>
<tr>
<td>Remote Service</td>
<td></td>
<td>11028</td>
<td>HTTP</td>
</tr>
</tbody>
</table>

1.3.2 **Communication between Tzunami Link Resolver Service and Tzunami Deployer/Tzunami Deployer Remote Service**

The following table lists the ports that should be open for communication between the **Tzunami Link Resolver Service** and **Tzunami Deployer/Tzunami Deployer Remote Service**.

<table>
<thead>
<tr>
<th>Service/Application</th>
<th>Function</th>
<th>Ports</th>
<th>Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tzunami Link Resolver Service</td>
<td>Tzunami Deployer/ Tzunami Deployer Remote Service</td>
<td>9028</td>
<td>NET.TCP</td>
</tr>
</tbody>
</table>

1.3.3 **Communication between client machine and SPS2003/WSS2.0 Server**

The following table lists the ports that should be open for communication between the client machine and the SPS2003/WSS2.0 Server.
Table 1-4: Communication between Client Machine and SPS2003/WSS2.0 Server

<table>
<thead>
<tr>
<th>Service/Application</th>
<th>Function</th>
<th>Ports</th>
<th>Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SharePoint</strong></td>
<td>Virtual Server (IIS Web site)</td>
<td>The defined ports of the Virtual Servers (default: 80)</td>
<td>TCP (HTTP)</td>
</tr>
<tr>
<td></td>
<td>Central Administration Site</td>
<td>Varies for different SharePoint installations</td>
<td>TCP (HTTP)</td>
</tr>
<tr>
<td><strong>NetBIOS</strong></td>
<td>Name Service</td>
<td>137</td>
<td>TCP + UDP</td>
</tr>
<tr>
<td></td>
<td>Datagram Service</td>
<td>138</td>
<td>UDP</td>
</tr>
<tr>
<td></td>
<td>Session Service</td>
<td>139</td>
<td>TCP</td>
</tr>
<tr>
<td></td>
<td>Microsoft Directory Services</td>
<td>445</td>
<td>TCP + UDP</td>
</tr>
<tr>
<td><strong>SQL Server</strong></td>
<td>Microsoft SQL Server (where relevant)</td>
<td>1433</td>
<td>TCP</td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server (where relevant)</td>
<td>1434</td>
<td>UDP</td>
</tr>
<tr>
<td></td>
<td>MSDE (where relevant)</td>
<td>Varies for different SharePoint installations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JDL-DBKitchen</td>
<td>3086</td>
<td>TCP</td>
</tr>
</tbody>
</table>

1.4 PERMISSION REQUIREMENTS

1.4.1 Tzunami Deployer

1.4.1.1 Connecting to SharePoint Web Front End Server

The user connecting from Deployer to SharePoint Web Front End Server (where Tzunami Remote Service is installed) should have following permissions.

- The user running Tzunami Deployer needs to be a Local Administrator (to get Registry and File System access).
- The user provided in Tzunami Deployer must have permission to connect to the machine where Tzunami Deployer Remote Service is installed (unless the source Remote Service has problems downloading files from the source which results in the Deployer-provided credentials being used).

1.4.1.2 Connecting to SharePoint Online

When connecting to SharePoint Online, the user connecting to the SharePoint Online must have the following permissions:

Table 1-5: SharePoint Online Permissions

<table>
<thead>
<tr>
<th>SharePoint Implementation</th>
<th>Tzunami Deployer (connect to SharePoint Online credential)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SharePoint Online</td>
<td>SharePoint Online Service Administrator, global administrator</td>
</tr>
</tbody>
</table>
or top-level administrator for your organization.

| SharePoint Site Collection              | Site Owner or Site Collection Administrator |


1.4.1.3 Connecting to SPS2003/WSS2.0
When connecting to the SPS2003/WSS2.0 Server, the user connecting to the server must have the following permissions:

**Table 1-6: SharePoint Portal Server 2003 Permissions**

<table>
<thead>
<tr>
<th>Permission Type</th>
<th>SPS2003/WSS2.0 as Source</th>
<th>SPS2003/WSS2.0 as Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative permissions on the SharePoint front-end machine (member of the local Administrators group)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Administrative permissions on the SharePoint sites</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>SQL Server Configuration Database</td>
<td>Read</td>
<td>Read</td>
</tr>
<tr>
<td>SQL Server Content Databases</td>
<td>Read</td>
<td>Read / Write</td>
</tr>
<tr>
<td>SQL Server stored procedures (SQL 2005 only)</td>
<td>Execute</td>
<td>Execute</td>
</tr>
<tr>
<td>Administrative share &quot;|&lt;SharePoint machine&gt;</td>
<td>\Program Files</td>
<td>Common Files</td>
</tr>
<tr>
<td>Remote registry access to &quot;Local Machine\SOFTWARE\Microsoft\Shared Tools\Web Server Extensions&quot; and all sub keys (In case not granted to the Administrators group)</td>
<td>Read</td>
<td>Read</td>
</tr>
</tbody>
</table>

1.4.2 Tzunami Deployer Remote Service

1.4.2.1 Connecting to SharePoint Web Front-End servers
When connecting to the SharePoint Web Front-End Server, you should provide Tzunami Deployer Remote Service with the SharePoint Server Farm Account credentials or following permissions.

The user running Tzunami Remote Service must have the following permissions:
• The user account must be a registered as Server Farm Account. This can be set up in SharePoint on the Central Administration > Security > Configure Service Accounts.

OR

• “Full Read” and “Full Control” rights on relevant Web Applications, including the Central Administration web application. This can be set up in SharePoint on the Central Administration > Application Management > Manage Web Application page for SharePoint Server 2010, SharePoint 2013 and SharePoint 2016.

• The user must be a member of the Farm Administrators group. This can be set up in SharePoint on the Central Administration > Security > Manage the Farm Administrative Group page for SharePoint Server 2010, SharePoint 2013 and SharePoint 2016.

• Read, Write and Execute permissions on the Configuration and relevant Content DB, similar to the Server Farm Account.

• The user must be a member of Local Administrator group on the machine where Tzunami Deployer Remote Service is installed.

For information about the different accounts, refer to:


2 INSTALLING TZUNAMI DEPLOYER AND SERVICE COMPONENTS

This chapter contains information about installing Tzunami Deployer, including the following topics:

• Installing Tzunami Deployer
• Installing Tzunami Deployer Service Components
• Uninstall Tzunami Deployer and Service Components
• Licensing Information
2.1 INSTALLING TZUNAMI DEPLOYER

This section of the guide provides you the comprehensive information for installing Tzunami Deployer. This manual also includes information about other related information and technical support.

Installing Tzunami Deployer is simple and easy. You can have it installed and running in no time. This guide will teach you how to install Tzunami Deployer for migrating contents from legacy ECM system to Microsoft SharePoint Products and Technologies.

To install Tzunami Deployer:

1. Unzip the zip file, and run TzunamiDeployerSetup.msi. The Tzunami Deployer setup wizard (Welcome window) will launch. To advance through the install wizard, click Next on the bottom of each screen.

![Welcome Window]

Figure 2-1: 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.
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**.
   • To change destination folder, click **Browse** and select a destination folder, click **OK**, and then click **Next**.

By default **Tzunami Deployer 3.3 SPO Migration API Service** is selected. **Tzunami Deployer 3.3 SPO Migration API Service** is required for migrating to SharePoint Online using Migration API. To deselect the service and install Tzunami Deployer only, select **Tzunami Deployer 3.3 SPO Migration API Service** and choose **Entire Feature will be unavailable**.
4. In the Ready to installation Tzunami Deployer 3.3 panel, click **Install**.

![Figure 2-4: Installing Tzunami Deployer](image)

5. Click **Finish** to exit the setup wizard.

![Figure 2-5: Installation Complete Window](image)

When Tzunami Deployer 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.
2.2 **INSTALLING TZUNAMI DEPLOYER SERVICE COMPONENTS**

Tzunami Deployer Service Components consist of three services:

- Tzunami Deployer Licensing Service
- Tzunami Deployer Remote Service
- Tzunami Link Resolver Service

2.2.1 **Tzunami Deployer Licensing Service**

The installation for the Tzunami Deployer Licensing Service is included in the same ZIP file as the Tzunami Deployer Remote Service.

*Tzunami Deployer Licensing Service MUST BE installed in order for Tzunami Deployer to be able to work.*

For more information about installation and configuration, see [*Tzunami Deployer Licensing Guide*](#).

2.2.2 **Tzunami Deployer Remote Service**

Tzunami Deployer Remote Service is a component that runs on the SharePoint Server and interacts with Tzunami Deployer in order to enable remote access to SharePoint servers.

When using Tzunami Deployer to migrate contents from SharePoint Server, you must install the Tzunami Deployer Remote Service on one of the SharePoint Web Front-End servers.

*Tzunami Deployer Remote Service is required only when connecting to the SharePoint Web Front-End servers. It IS NOT required when connecting to SPS2003/WSS2.0 and SharePoint Online.*

2.2.2.1 **Installing Tzunami Deployer Remote Service**

To install Tzunami Deployer Remote Service Component:

1. On one of the SharePoint Web Front-End servers unzip the zip file, and run `DeployerServiceComponentsSetup.msi`. The Tzunami Deployer 3.3 Service Components Setup Wizard (Welcome window) will be launch. To advance through the install wizard, click **Next** on the bottom of screen.
2. In the End User Licensing Agreement panel, click “I accept the terms in the License Agreement” and click Next to continue installation.

![Figure 2-6: Welcome Window](image)

![Figure 2-7: End-User Licensing Agreement Window](image)

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, click Deployer Remote Service and do one of the following:
   - To accept the default Destination Folder, click Next.
   - To install in other location, click Browse and select a destination folder, click OK and then click Next.
To install *Tzunami Deployer Remote Service* only, click *Deployer Licensing Service* and choose *Entire Feature will be unavailable* and again click *Deployer Link Resolver Service* and choose *Entire Feature will be unavailable*.

4. In the *Service account* panel, provide the credential for the Tzunami Deployer Remote Service log on account, and click **Next**. For more information about the Username used for the Tzunami Deployer Remote Service, refer to *Connecting to SharePoint Web Front-End servers* on page 1-4.

5. In the Ready to install Tzunami Deployer ServiceComponents panel, click **Install**.
6. Click **Finish** to exit from the setup wizard.

Remote Service Settings window will appear.

If the Remote Service Settings window does not appear, click **Start > All Programs > Tzunami > Deployer 3.3 Remote Service > Settings Manager**. For more information, see *Configuring Tzunami Link Resolver Service to communicate with* on page 2-21.
7. Fill in the fields according to the information in the following table and click OK.

### Table 2-1: Remote Service Settings

<table>
<thead>
<tr>
<th>Field/Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address</strong></td>
<td></td>
</tr>
<tr>
<td>Licensing Service</td>
<td>Enter the Server Name or IP address of the machine where the Tzunami Licensing Service is installed. For more information, see <em>Tzunami Licensing Service Guide</em>.</td>
</tr>
<tr>
<td>Link Resolver Service</td>
<td>Enter the Server Name or IP address of the machine where Link Resolver Service is installed. For more information about Link Resolver Service, refer to <em>Tzunami Link Resolver Service</em> on page 2-17.</td>
</tr>
<tr>
<td><strong>Service Timeout</strong></td>
<td></td>
</tr>
<tr>
<td>Receive Timeout</td>
<td>Specify the duration that Remote Service waits to receive response for its request from Link Resolver Service and Tzunami Licensing Service.</td>
</tr>
<tr>
<td>Send Timeout</td>
<td>Specify the duration that Remote Service waits for an operation to complete and send to Link Resolver Service and Tzunami Licensing Service.</td>
</tr>
</tbody>
</table>
2.2.2 Delay

<table>
<thead>
<tr>
<th>Field/Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay</td>
<td>Specify the time that Remote Service waits after uploading a document.</td>
</tr>
<tr>
<td>Post Upload wait time</td>
<td>Specify the time that Remote Service waits after uploading items property.</td>
</tr>
<tr>
<td>Post Update wait time</td>
<td>Specify the time that Remote Service waits after updating items property.</td>
</tr>
<tr>
<td>List read back time</td>
<td>Specify the time that Remote Service waits after creating a list or library.</td>
</tr>
<tr>
<td>Logging Level</td>
<td>Specify the verbosity of the Tzunami Deployer Remote Service logs. The higher the level you select, the more verbose the logs will be. It is recommended to leave this to Debug level.</td>
</tr>
</tbody>
</table>

If the service is not running, check the Windows Event Log for entries pertaining to the Tzunami Deployer Remote Service.

2.2.2.2 Changing Tzunami Deployer Remote Service Credentials

To change Tzunami Deployer Remote Service credentials:

1. Click **Start > Run** and enter **Services.msc**. The Services window appears.


3. In the Log On tab, enter the user name and password. Use the same user name you enter in Tzunami Deployer when connecting to the SharePoint.
WFE Server. Make sure the user name has all the required permissions, as detailed in *Connecting to SharePoint Web Front End Server* on page 1-4.

4. Click **OK**.

5. In the Services window, right-click **Tzunami Deployer 3.3 Remote Service** and select **Restart**.

### 2.2.3 Tzunami Link Resolver Service

Tzunami Link Resolver Service is a component introduced for fixing links during migration. An item (say A) may contain a link to another item (say B) in the source. When A and B have been migrated to target SharePoint (let’s say as A’ and B’), the link in item A’ should point to item B’ in the target and not to item B in the source. This requires fixing of the link inside A to point to B’ during migration. This is achieved using the Tzunami Link Resolver Service.

The Tzunami Link Resolver Service runs as a windows service. Tzunami Deployer and Tzunami Remote Services communicate with the Tzunami Link Resolver Service to get necessary information for fixing the links in the content during commit. A single instance of the Link Resolver Service should be installed. All Tzunami Deployer and Tzunami Deployer Remote Service should be configured to point to the Link Resolver Service.

![Tzunami Link Resolver Service Architecture](image)

*Figure 2-14: Tzunami Link Resolver Service Architecture*
2.2.3.1 Installing Tzunami Link Resolver Service

To install Tzunami Link Resolver Service:

1. On one of the SharePoint front-end Web Servers or other server which can be accessible via system running Tzunami Deployer and Tzunami Remote Service, unzip the zip file, and run DeployerServiceComponentsSetup.msi. The Tzunami Deployer 3.3 Service Components Setup Wizard (Welcome window) will be launched. To advance through the install wizard, click **Next** on the bottom of each screen.

![Welcome Window](image)

2. In the End User Licensing Agreement panel, click “**I accept the terms in the License Agreement**” and click **Next** to continue installation.
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, click **Deployer Remote Service** and do one of the following:
   - To accept the default Destination Folder, click **Next**.
   - To change the installation path, click **Browse** and select a destination folder, click **OK**, and then click **Next**.

To install **Tzunami Link Resolver Service** only, click **Deployer Link Resolver Service** and choose **Entire Feature will be installed in local hard drive** and make sure other components are not selected.
4. In the Ready to install Tzunami Deployer 3.3 Service Components panel, click Install.

![Image showing the Ready to Install panel]

Figure 2-18: Installing Tzunami Deployer Link Resolver Service

5. Click **Finish** to exit from the setup wizard.

![Image showing the Installation Complete window]

Figure 2-19: Installation Complete Window
2.2.3.2 Configuring Tzunami Link Resolver Service to communicate with Tzunami Remote Service
You should configure Tzunami Deployer Remote Service to communicate with Tzunami Link Resolver Service prior to starting commit to SharePoint Servers.

To configure Tzunami Deployer Remote Service

1. Click Start > All Programs > Tzunami > Deployer 3.3 Remote Service > RS Configuration Tool.
2. In Link Resolver Service Address, enter the Name or IP address of the machine where Tzunami Link Resolver Service is installed (Figure 2-12).
3. Click OK to Save.

2.2.3.3 Configuring Tzunami Link Resolver Service to communicate with Tzunami Deployer

To configure Tzunami Deployer

1. Click Start > All Programs > Tzunami > Settings Manager 3.3.
2. In Link Resolver Service Address, enter the Name or IP address of the machine where Tzunami Link Resolver Service is installed.

![Figure 2-20: Deployer Settings Window](image-url)
Table 2-2: Deployer Settings

<table>
<thead>
<tr>
<th>Field/Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address</strong></td>
<td></td>
</tr>
<tr>
<td>Licensing Service</td>
<td>Enter the Server Name or IP address of the machine where the Tzunami Licensing Service is installed. For more information, see <strong>Tzunami Licensing Service Guide</strong>.</td>
</tr>
<tr>
<td>Link Resolver Service</td>
<td>Enter the Server Name or IP address of the machine where <strong>Tzunami Link Resolver Service</strong> is installed.</td>
</tr>
<tr>
<td><strong>Licensing Service</strong></td>
<td></td>
</tr>
<tr>
<td>Receive Timeout</td>
<td>Specify the duration that Tzunami Deployer waits to receive response for its request from Tzunami Licensing Service.</td>
</tr>
<tr>
<td>Send Timeout</td>
<td>Specify the duration that Tzunami Deployer waits for an operation to complete sent to Tzunami Licensing Service.</td>
</tr>
<tr>
<td><strong>Link Resolver Service</strong></td>
<td></td>
</tr>
<tr>
<td>Receive Timeout</td>
<td>Specify the duration that Tzunami Deployer waits to receive response for its request from Link Resolver Service.</td>
</tr>
<tr>
<td>Send Timeout</td>
<td>Specify the duration that Tzunami Deployer waits for an operation to complete sent to Link Resolver Service.</td>
</tr>
</tbody>
</table>

3. Click **OK** to Save.

2.3 UNINSTALL TZUNAMI DEPLOYER AND SERVICE COMPONENTS

This section of the guide illustrates different ways to remove or uninstall Tzunami Deployer and Service Components. Here are the three different ways to uninstall Tzunami Deployer:

- Uninstallation using Installer
- Uninstallation using Control Panel
- Uninstallation using Uninstall shortcut

To uninstall Tzunami Deployer and Service Components, user needs to be a Local Administrator. Uninstalling Tzunami Deployer and Service Components 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.

Tzunami log files, licensing information files etc. will remain after uninstalling Tzunami Deployer and Service Components. You can manually delete those files from your computer if needed. By default logs and licensing information’s etc. are located at the “C:\Program Files (x86)\Tzunami\Deployer 3.3”, or where Tzunami Deployer or Tzunami Deployer Service Components is installed. Tzunami Deployer Options information will be available in...
“C:\Users\<user>\AppData\Local\Tzunami_Inc” location. Tzunami Link Resolver data’s and licensing service information are available in “C:\ProgramData\Tzunami” folder.

2.3.1 Uninstallation using Installer

To uninstall Tzunami Deployer and Tzunami Deployer Service Components using Installer

1. Close Tzunami Deployer.
2. Unzip the zip file, and run TzunamiDeployerSetup.msi or DeployerServiceComponentsSetup.msi. The Tzunami Deployer setup wizard (Welcome window) or Tzunami Deployer Service Components 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 the application from your system.
4. In the Ready to remove panel, click “Remove” to remove the application from your computer.
5. Click Finish to exit the setup wizard.

You can right-click Tzunami Deployer setup (TzunamiDeployerSetup.msi or DeployerServiceComponentsSetup.msi) file and select Uninstall to remove or uninstall the application from your computer.

2.3.2 Uninstallation using Control Panel

To uninstall Tzunami Deployer and Tzunami Deployer Service Components using Control Panel

1. Go to Control Panel.
2. Click Programs > Programs and Features.
3. Right-click the Tzunami Deployer 3.3 application you want to remove, and then click Uninstall.

2.3.3 Uninstallation using shortcuts

To uninstall Tzunami Deployer and Tzunami Deployer Service Components using Uninstall Shortcuts.

1. Go to Start menu.
2. Search for Uninstall Tzunami Deployer 3.3 or Uninstall Tzunami Deployer 3.3 Service Components, then click.
3. Windows Installer window will prompt a message “Are you sure you want to uninstall this product?”
4. Click “Yes” to uninstall the application from your computer.
3 LICENSING INFORMATION

Tsunami Deployer Licensing Service provides project managers with the centralized point of management for the Tsunami Deployer licenses. To ensure successful migration, you must install and configure the Tsunami Deployer Licensing Service.

When committing a Tsunami Deployer project, Tsunami Deployer Licensing Service verifies current licenses to migrate source ECM contents to Target SharePoint list and libraries. For more information about installation and configuration, see Tsunami Deployer Licensing Guide.

For any question regarding usage of Tsunami Licensing Service, or for updated licenses, please contact the Tsunami Support Team at support@tzunami.com.
4 COPYRIGHT AND TRADEMARK

© Copyright 2019. Tzunami Inc. All rights reserved.

All intellectual property rights in this publication are owned by Tzunami, Inc. and protected by United States copyright laws, other applicable copyright laws and international treaty provisions. Tzunami, Inc. retains all rights not expressly granted. No part of this publication may be reproduced in any form whatsoever or used to make any derivative work without prior written approval by Tzunami, Inc.

No representation of warranties for fitness for any purpose other than what is specifically stated in this guide is made either by Tzunami, Inc. or by its agents.

Tzunami, Inc. reserves the right to revise this publication, and/or make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time without prior notice.

Any software on removable media described in this publication is furnished under a license agreement included with the product as a separate document. If you are unable to locate a copy, please contact Tzunami, Inc. and a copy will be forwarded to you.

Tzunami is either a registered trademark or a trademark of Tzunami, Inc. in the United States and/or other countries.

All other brand or product names are trademarks or registered trademarks of their respective companies.

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