Kofax TotalAgility

Migration Guide

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Preface

This guide includes the functionality which is impacted, and general instructions on upgrading TotalAgility from version 5.5.0 to 7.0.0 or 7.0.2. Read this guide completely before upgrading TotalAgility from version 5.5.0 to 7.0.0 or 7.0.2.

- TotalAgility only supports upgrade from version 5.5.0; it does not support upgrade from any versions lower than 5.5.0.
- TotalAgility does not support upgrade from version 5.5.0 or 6.0.0 to version 7.0.1.
- TotalAgility does not support direct upgrade from version 5.5.0 to 7.6.0. To upgrade 5.5.0 to 7.6.0, you must first upgrade TotalAgility 5.5 to 7.0.2 and then upgrade 7.0.2 to 7.6.0.

Related documentation

The full documentation set for Kofax TotalAgility is available at the following location.

https://docshield.kofax.com/Portal/Products/KTA/7.8.0-dpm5ap0jk8/KTA.htm

In addition to this guide, the documentation set includes the following items:

- Kofax TotalAgility Prerequisites Guide: Provides system requirements for installing TotalAgility, instructions for running the prerequisite utility, and a software checklist for various installation types.
- · Kofax TotalAgility Installation Guide: Describes how to install and configure TotalAgility.
- Kofax TotalAgility Integration Server Installation Guide: Describes how to install Kofax Integration Server and integrate it with other products.
- Kofax TotalAgility On-Premise Multi-Tenant Installation Guide: Describes how to install and configure On- Premise Multi-Tenant system.
- Kofax TotalAgility Configuration Utility Guide: Explains how to use the Configuration Utility to update settings across various configuration files for different types of installation and deployment.
- Kofax TotalAgility Administrator's Guide: Provides information to the administrator on configuring and maintaining a TotalAgility installation.
- Kofax TotalAgility Architecture Guide: Provides an overview of the TotalAgility architecture, covering various deployments for on-premise, on-premise multi-tenancy and Azure environments.
- Kofax TotalAgility Best Practices Guide: Describes the best practices you must follow when using TotalAgility to improve performance, cost, maintenance, availability and security.
- Kofax TotalAgility Features Guide: Provides an overview of the TotalAgility features.
- Kofax TotalAgility Migration Guide: Provides information on TotalAgility upgrades from different versions and post upgrade configuration.
- Kofax TotalAgility Help: Provides details about using TotalAgility to design business jobs and cases, assign resources, create forms, integrate with external applications, and more. Access the help from the TotalAgility application by clicking the Help button.

- Kofax TotalAgility Workspace Help: Describes how to use the Workspace to manage activities, jobs, and resources. Access the help from the TotalAgility Workspace by clicking the Help button.
- Kofax TotalAgility On-Premise Multi-Tenant System Help: Describes how to create and manage tenants using the TotalAgility On-Premise Multi-Tenant system.
- Kofax TotalAgility Web Capture Control Help: Provides details on using a Web Capture control in creating multi-page documents, creating a new document in a new folder, deleting pages that have been incorrectly scanned, and more; also, describes the buttons available in a Web Capture control toolbar.
- Kofax Analytics for TotalAgility Product Features Guide: Provides an overview of the dashboards that help you track data through the workflow, analyze the effectiveness of the processes and resources, and address business problems.
- Kofax TotalAgility Tables: Describes the Kofax TotalAgility tables and fields used by Kofax Analytics for TotalAgility.
- *Migration From Kofax Products Guide*: Provides information about migrating TotalAgility files and Kofax Transformation Modules projects to TotalAgility.

Training

Kofax offers both classroom and computer-based training that will help you make the most of your Kofax TotalAgility solution. Visit the Kofax website at www.Kofax.com for complete details about the available training options and schedules.

Getting help with Kofax products

The Kofax Knowledge Base repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Base to obtain answers to your product questions.

To access the Kofax Knowledge Base, go to the Kofax website and select **Support** on the home page.

Note The Kofax Knowledge Base is optimized for use with Google Chrome, Mozilla Firefox or Microsoft Edge.

The Kofax Knowledge Base provides:

- Powerful search capabilities to help you quickly locate the information you need.
 Type your search terms or phrase into the Search box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
 Scroll through the Kofax Knowledge Base home page to locate a product family. Then click a product family name to view a list of related articles. Please note that some product families require a valid Kofax Portal login to view related articles.
- Access to the Kofax Customer Portal (for eligible customers).
 Click the Customer Support link at the top of the page, and then click Log in to the Customer Portal.
- Access to the Kofax Partner Portal (for eligible partners).
 Click the Partner Support link at the top of the page, and then click Log in to the Partner Portal.

• Access to Kofax support commitment, lifecycle policies, electronic fulfillment details, and self-service tools.

Scroll to the **General Support** section, click **Support Details**, and then select the appropriate tab.

Introduction

The upgrade process does the following:

- Uninstalls the 5.5 installation media.
- Upgrades the database and the schema.
- · Upgrades the processes.
- Modifies live activity files with the ".SPPX" extension to the ".FORM" extension.

The upgrade process does not upgrade forms. See Perform post-upgrade configuration.

Before you upgrade

The upgrade process uninstalls TotalAgility 5.5.0 but does not upgrade existing forms. To port forms from version 5.5.0 to 7.0.0 or 7.0.2, import the legacy 5.5 PAC files into TotalAgility 7.0.0 or 7.0.2.

Note When upgrading TotalAgility to 7.0.2, resource password is lost. If you manually login, ensure to reset the password:

- 1. First use blank password to login.
- **2.** In the TotalAgility Resource module, reset the password. See TotalAgility help for more information.

To port forms to TotalAgility 7.0.0 or 7.0.2:

- Export the legacy 5.5 PAC files to a backup location outside the TotalAgility 5.5.0 installation directory. The upgrade process deletes TotalAgility 5.5.0 and all associated subdirectories.
- Save custom solution items, such as Custom ASPX pages and Custom Assemblies to a backup location outside the TotalAgility 5.5 installation directory.
- Create unique form names across packages. Form names must be unique in TotalAgility 7.0.0 or 7.0.2.
- Save images and style sheets to a backup location outside the TotalAgility 5.5.0 installation directory. Use one of the following options to save images:
 - Copy the image referenced by a form into the \Forms\Images\ directory and copy the images across all VM instances.
 - Reconfigure the image within the form to point to a valid URL.

Upgrade from TotalAgility 6.0.0 to 7.0.2 and above

If you are upgrading from 6.0.0 to 7.0.2 or above, you must delete the older versions of system maps.

Perform post-upgrade configuration

- **1.** Import legacy packages. See *Import a form* in *TotalAgility help*. The upgrade process makes the following changes:
 - Creates a site with the name of the solution being imported.
 - Creates a category with the name of the solution being imported and adds forms to this category.
 - Changes solution variables to global variables. The system adds these global variables to the category created.
 - Generates warnings for items that the product no longer supports, such as form controls and events.
 - Removes the old integration components and installs the new components for all integrations, including SharePoint, TRIM, Dynamics, and others.
- **2.** Modify integration settings in the Designer. For example, for the SharePoint integration, change the URL to point to the new SharePoint web service.
- **3.** Modify Key/Values added to web.config and AWProcesswork.exe.config in TotalAgility 5.5.0 to the TotalAgility 7.0.0 or 7.0.2 equivalents—web.config and Agility.Server.Core.WorkerService.exe.config.
- **4.** Configure server-side actions to always execute on the Application server.
- **5.** If you implemented a custom solution, such as a Windows Forms application, by consuming the TotalAgility 5.5.0 .NET wrappers, modify the configuration to define the location of the server by adding WCF endpoints to the relevant TotalAgility 7.0.0 or 7.0.2 web services. See the next section, Calling Legacy Kofax TotalAgility .NET Wrappers From a Custom Solution.
- **6.** If you used features that are no longer available in TotalAgility 7.0.0 or 7.0.2, rework these features to make them functional in 7.0.0 or 7.0.2. See Features not supported or changed.

Call legacy Kofax TotalAgility .NET wrappers from a custom solution

This section does not apply to legacy Kofax TotalAgility .NET wrappers called by the main TotalAgility web site.

Install the legacy wrappers

Run the following custom executable which installs the legacy wrappers: C:\Program Files\Kofax \TotalAgility\LegacyWrappers\WrapperInstaller.exe

While importing, make sure the items, such as images, stylesheets, and processes used on the 5.5 server are made available on the Kofax TotalAgility 7.0.2 server.

When you call the legacy Kofax TotalAgility .NET wrappers from a custom web solution or forms application, you need to configure some additional settings and copy assemblies.

Configure additional settings

Configure additional settings in the application's **Configuration** file. If it is a web application, then add the settings to the **web.config** file.

1. Add the following keys in the appSettings section.

```
<add key="IsMultitenantDeployment" value="false"/>
<add key="SdkServicesLocation" value=""/>
```

The value for the SDK Services Location will be something similar to the following: http://localhost/TotalAgility/Services/SDK.

The value for the Core Services Location will be something similar to the following: http://localhost/TotalAgility/Services/Core.

2. Depending on the Legacy Wrapper(s) being called, configure additional endpoints. For example, if APIs are being called on the ResourceManager, then configure the following endpoint:

```
<endpoint name="SdkResourceServiceEndpoint"
binding="basicHttpBinding"
bindingConfiguration="BasicHttpBinding_Service"
contract="Agility.Sdk.Model.Interfaces.Services.IResourceService"/>
```

3. Add a binding section as follows:

```
<bindings>
<basicHttpBinding>
<binding name="BasicHttpBinding Service" closeTimeout="00:01:00"</pre>
openTimeout="00:01:00" receiveTimeout="00:10:00" sendTimeout="00:01:00" allowCookies="false" bypassProxyOnLocal="false"
hostNameComparisonMode="StrongWildcard" maxBufferSize="2147483647"
maxBufferPoolSize="524288" maxReceivedMessageSize="2147483647"
messageEncoding="Text" textEncoding="utf-8" transferMode="Buffered"
useDefaultWebProxy="true">
<readerQuotas maxDepth="32" maxStringContentLength="8192" maxArrayLength="16384"</pre>
maxBytesPerRead="4096" maxNameTableCharCount="16384"/>
<security mode="TransportCredentialOnly">
<transport clientCredentialType="Windows" proxyCredentialType="None" realm=""/>
<message clientCredentialType="UserName" algorithmSuite="Default"/>
</security>
</binding>
</basicHttpBinding>
</bindings>
```

Copy additional assemblies

Copy additional assemblies into the application's running directory. For example, for a web application, add these assemblies to the bin directory:

- Agility.Sdk.Model.dll
- Agility.Server.Common.dll
- · Agility.Server.Core.Model.dll
- · Agility.Server.Integration.Common.dll
- Agility.Server.Integration.Model.dll
- TotalAgility.Sdk.dll

Install legacy web services

Copy the bin and Services folder from the LegacyWebServices folder available in TotalAgilityInstall folder to $\TotalAgility\Agility\Agility\Server\Web$ folder.

Features not supported or changed

If you used features that are no longer available in TotalAgility 7.0.0, rework these features to make them functional in 7.0.0. The following table outlines changes to TotalAgility features, the potential impact on your solutions, and the proposed resolution.

General functionality not supported or changed

Functionality Not Supported / Changed	Description
Reports and Dashboards	Kofax is considering alternative replacement options.
BAM and BAM Nodes	TotalAgility 7.0.0 does not support BAM and replaces BAM nodes with Synchronization nodes.
PI Reporting	The upgrade does not upgrade the PI database. You must perform the upgrade manually.

Process functionality not supported or changed

Functionality Not Supported / Changed	Description
COM and COM Transactional Nodes	TotalAgility 7.0.0 replaces COM and COM Transactional nodes with Synchronization nodes.
	Redesign your processes to use other supported features to achieve the desired functionality.
Non-Ordinary Manual Activities (Client Side Scripts - VB and C#)	Because only ordinary activities can be manual, non-ordinary manual activities, such as manual .NET activities (VB and C #) become automatic and the following happens:
	Activity notifications are removed from the non-ordinary manual activities once converted to automatic activities.
	The jobs created using these processes may fail at runtime, because the reference might not exist on the server.
	Rework your process and its activities to ensure that the process operates as needed.
Creating Jobs On a Process Having Clashing Variables	In TotalAgility 5.5.0, a process can have clashing variable (a process variable and a work queue definition field having the same IDs but different types); if you add incorrect data to a job at runtime, the job exhibits unexpected behavior. TotalAgility 7.0.0 also behaves in a similar manner.
	Importing such processes into TotalAgility 7.0.0 generates a warning.
	You cannot create jobs for these processes in TotalAgility 7.0.0.
	Modify processes before upgrading or importing them to eliminate the possibility of unexpected behavior.
Resource Maintenance - Resource Notes	TotalAgility 7.0.0 does not support resource notes.

Functionality Not Supported / Changed	Description
Process Design - Custom Data Groupings	TotalAgility 7.0.0 does not support custom Data Groupings in processes.
Process Design – Maintaining Custom Nodes	You can run custom nodes within a process. However, you must configure custom nodes as .NET calls in TotalAgility 7.x.x.
Adding N/W Resources	Active Directory Synchronization supersedes resource maintenance using the N/W resources.
Virtual Entities	Virtual entities are not supported.
Custom Changes to System Maps	In TotalAgility 7.0.0, system maps available with the installation are used as a base.
	Delete the System maps in TotalAgility 5.5.0 before upgrading to TotalAgility 7.0.0.
	If you modified any System maps in TotalAgility 5.5.0, reapply the changes in TotalAgility 7.0.0.
	Note TotalAgility 7.0.2 does not support the PI system map from 5.5.0. To use the PI system map in TotalAgility 7.0.2, you must get this map from Kofax Technical Support.
'NOT' keyword	TotalAgility 7.0.0 does not support 'NOT' in branching rules and decisions. Instead use '!'.

Form functionality not supported or changed

Functionality Not Supported / Changed	Description
Importing Stylesheets	Manually copy Stylesheets into the StyleSheets subdirectory of the Web directory.
Presets	In TotalAgility 5.5.0, a theme can use a Preset, which applies style settings to controls; some of the Preset style settings can be overridden in the Theme. In TotalAgility 7.0.0, these style settings come from the theme.
Themes	Any Configured theme information is lost.
Multiple Style Settings are Grouped Under Theme or Inline	In TotalAgility 5.5.0 a form with multiple controls can use the Style – inline properties. In TotalAgility 7.0.0, style settings are grouped under Theme and Inline. Controls can use either theme or inline.
Importing Images	Manually copy images into the Images subdirectory of the Web directory.
Overwrite in Forms	Only imports forms when the version is greater than the current form.
Some Form Attributes	Does not support the following form attributes: • Ajax Enabled • Error Image Path • Foreground Color • Highlight Controls On Error

Functionality Not Supported / Changed	Description
	Relative Control Width
	Error Option
Form Layout	The form layout may change when importing the forms into TotalAgility 7.0.0. You may need to modify the layout of the form.
Associated Value for a Dropdown Prompt	In TotalAgility 5.5.0, the Prompt for a drop-down menu (Default Selection) can have an associated value. In TotalAgility 7.0.0 the Prompt cannot have a value. This impacts imported 5.5 Forms where the drop-down default selection has an associated value. For instance, selecting a dropdown Prompt in TotalAgility 5.5.0 could be configured to pass "None" to a .NET method. In TotalAgility 7.0.0 selecting the Prompt now passes an empty string. Redesign the form to achieve the required behavior.
Labels Associated With Controls Participating In Actions	In TotalAgility 5.5.0, labels associated with controls such as text boxes and drop-down menus, can participate in an event (action). In TotalAgility 7.0.0 labels cannot do so. Reconfigure actions to use a separate label control.
Some Form Controls	The following controls in TotalAgility 5.5.0 have no
	equivalent controls in TotalAgility 7.0.0:
	Daily Workload Lyna Castrala
	Lync Controls Toke Activity
	Take Activity Create New Job
	Job Note
	Job Properties
	Login Perform Action Button
	BAM Chart
	The following controls do not exist in TotalAgility 7.0.0, but are handled as follows:
	Grid View – Replaced by Table.
	Panel – Replaced by Cell.
	Panel Multi Column – Replaced with multiple Cell.
	Section – Use Row for this control.
	Work Queue Summary control, which is almost the same as Work Queue control.
Panels and Overlaying Controls	Cells replace panels, and you cannot overlay controls; controls must be relative to one another.
	Replacing panels with cells has an indirect impact in TotalAgility 7.0.0. For example, for a TotalAgility 5.5.0 form that contains a parent panel, which contains a child panel, you can define a display rule to hide the parent

Functionality Not Supported / Changed	Description
	panel. When you run the form, the display rule hides both parent and child panels.
	When you import the same form into TotalAgility 7.0.0, TotalAgility replaces both panels with cells and does not overlay them.
	When you run the form, the display rule hides only the cell that replaced the parent panel.
	Redesign the form to achieve the required functionality.
Begin and End Transaction Form Events	If transactions must span multiple form events, implement a custom solution.
TotalAgility 5.5 Work Queue Forms	Work Queue forms are not imported into TotalAgility 7.0.0.
Populating The Solution Variable, SPP_WINDOWS_LOGON_ID at Runtime	In TotalAgility 5.5.0, the Solution variable SPP_WINDOWS_LOGON_ID is populated with the User's NT login name at runtime. In TotalAgility 7.0.0, this variable is not populated, which affects pages that use this solution variable including the Auto logon pages.
	Replace Auto logon pages with Logon pages built in TotalAgility 7.0.0.
	Rework pages that use this global variable to use another value.
Custom ASP.NET Controls	TotalAgility 7.0.0 does not support custom ASP.NET controls.
	Consider using an ASP.NET page as an alternative.
Time Portion of Calendar Controls	In TotalAgility 5.5.0, when consuming data from a calendar control, TotalAgility returns a time portion. The time portion is not available in TotalAgility 7.0.0.
	Modify forms that require a time portion as needed. For example, if a form has display rule that checks for "02/02/2013 00:00", modify the display rule.
Navigation	 Associated Image For Navigation Menu Items: In TotalAgility 5.5.0, you can use an image for a navigation menu item to make it aesthetically appealing. You cannot do so in TotalAgility 7.0.0. Navigation Style: In TotalAgility 5.5.0, Navigation can have a Tree style. In TotalAgility 7.0.0, the Navigation is imported as Vertical Navigation.
	Header Height and Width Incorrect After Import of 5.5.0 Package: Update the height and width after import and save the menu.
Custom ASPX Pages	Configure the custom ASPX pages to use an absolute path. For example, use "http://lcoahost/totalagility/test.aspx" and not "test.aspx".
Forms Actions Using Stored Procedure Returning a RESULTSET	A DAS query calling a stored procedure with an OUTPUT parameter populates the control mapped to

Functionality Not Supported / Changed	Description	
	 the OUTPUT parameter. For a drop-down, this sets to default selection. In TotalAgility 5.5.0, when the stored procedure has one or more OUTPUT parameters and also return ResultSet, you can configure the OUTPUT to pop columns in a Table or the data in a drop-down list the following sample configuration. 	
	Name Value	
	ResultSet	
	@pDescription table1.Column1	
	@pID table1.Column2	
	@pBusinessUnit	
	In TotalAgility 7.0.0, you cannot use this process. Instead, redesign your forms. See the following sample configuration. Output Parameters Name ✓ Resultset Description LookUpID ©pDescription ©pDescription ©pID ©pBusinessUnit	
Using Features Which Are Not OOTB Or Are Undocumented	 TotalAgility 7.0.0 does not support using features which are not OOTB or are undocumented. For example: A TotalAgility 5.5.0 solution implemented to use JavaScript in form controls such as label may not have the same behavior in TotalAgility 7.0.0. TotalAgility 7.0.0 does not support internally maintaining Solution variable values using the ASP.NET Session State. Rework solutions that use undocumented features. 	
Form Field Validation	In TotalAgility 5.5.0, form field validation occurs when the field loses focus, for example, when entering data into a text box. In TotalAgility 7.0.0, validation occurs on key down.	
Solutions Deployed Using TotalAgility 5.5	Solutions deployed using TotalAgility 5.5 do not execute at runtime; they have dependencies on TotalAgility 5.5 assemblies that are no longer present.	
Importing Form When the Header Already Exists	When importing forms and selecting to import the header, if a form with the same name as the header already exists, this form is used as the header form for the forms being imported.	

Functionality Not Supported / Changed	Description
Not all Fonts in TotalAgility 5.5 Are Present In TotalAgility 7.0	TotalAgility 7.0.0 does not support all TotalAgility 5.5.0 fonts. If a control uses a font that cannot be used in TotalAgility 7.0.0, a default font is used.
Invalid Date and Time Values in Forms Need Remedy	TotalAgility 7.0.0 enforces more stringent date checks than TotalAgility 5.5.0. This causes an issue in Forms containing invalid date-times (Date values greater than 01-January-1970).
.NET Reference	The .NET reference is added if it does not exist on the target environment.
.NET Action/Event Mappings	The .NET action or event mappings within a form does not assume a default value when the system cannot convert the source value to the target TYPE.
Location of The OOTB Legacy Web Services	The OOTB legacy web services are in a different location than before. For example, if in TotalAgility 5.5.0, the web services are at the following location: http://localhost/PlatformManagerWs/PlatformManagerWs.asmx. In TotalAgility 7.0.0, they are at the following location: http://localhost/TotalAgility/Services/Legacy/PlatformManagerWs.asmx. TotalAgility 7.0 does not support web services with the extension of .WSDL. Modify the extension to .ASMX at design time.
formshelper - Date Calls	In TotalAgility 5.5.0 formshelper - Date APIs return output date values in current culture. In TotalAgility 7.0.0, these values will be converted to ISO format. If you are using these output date values for string comparisons, make sure they do not fail.

Workspace functionality not supported or changed

Functionality Not Supported / Changed	Description
Workspace Forms	In TotalAgility 7.0.0, new equivalent Workspace forms are available. If you used a 5.5.0 Workspace form in a solution, replace the form with the equivalent TotalAgility 7.0.0 form.
Workspace Forms Not Available for Modification	Some workspace forms, such as Manage Resource, are not available in the TotalAgility 7.0.0 Forms Designer for modification. You cannot modify these forms as you could in TotalAgility 5.5.0.
Custom Pages From the ASP.NET Solution	The TotalAgility 5.5.0 Workspace used Custom pages implemented in an ASP.NET solution. These custom pages are not ported to TotalAgility 7.0.0 during an upgrade. In most cases equivalent pages are created in TotalAgility 7.0.0.

Functionality Not Supported / Changed	Description
Error Location	In TotalAgility 5.5.0, you can specify the location of the error, such as Default, Pop-up, Top, or Bottom.
	In TotalAgility 7.0.0, the error appears in a pop-up dialog box.
Report Wizard Forms	TotalAgility 5.5.0 uses report wizard forms that are not available in TotalAgility 7.0.0. Kofax is considering Reporting alternatives.
Delegations (RetrieveAllDelegations Method)	The way this form was implemented in TotalAgility 5.5.0 will not work in TotalAgility 7.0.0.
	In TotalAgility 5.5.0, the End Date for each delegation is not null; by default it is 01-01-0001. In TotalAgility 7.0.0, the default is 01-01-1900 because of WCF JSON serialization.

APIs not implemented in TotalAgility 7.0.0

Class	Methods
ActivityManager	ResetTakenActivity(string SessionId, string JobId, short EmbeddedProcessCount, short NodeId)
DynamicResourcesHelper	AddResourceWithServerId(string UserId, string ServerId, string ExistingDynamicXmI)
	AddResourcesUsingServerIds(RemoteResource[] Resources, string ExistingDynamicXml)
EngineManager	AddLiveActivityResourcesWithServerIds(string JobId, short NodeId, short EmbeddedProcessCount, RemoteResource[] ResourcesWithServerIds)
	ReplaceLiveActivityResourcesWithServerIds(string JobId, short NodeId, short EmbeddedProcessCount, RemoteResource[] ResourcesWithServerIds)
	ReAssignLiveActivitiesForResource ToResourceWithServerId(string OriginalResourceId, string NewResourceId, string NewServerId)
Admin	ProcessWorkInfo[] GetProcessWorkStatuses(string SessionId)
	RemoveMisEntries(string SessionId, DateTime DateFrom, DateTime DateTo, string ServerString)
	 PopulateMisDb(string SessionId, DateTime DateFrom, DateTime DateTo, string ServerString)
PlatformManager	ProcessAutomaticActivityFailure(string ExceptionCode, string JobId, short NodeId, short EmbeddedProcessCount, short AutoActivityType, bool CancelActivity)
	EngineDetails[] GetEngineList(string SessionId)
	DeclineOfferedActivity(string SessionId, string JobId, short ProcessId, short NodeId)
	BusinessUnit[] GetBusinessUnits(string SessionID)
	CRMEntities[] GetCRMEntitiesList(string SessionID, string BusinessUnit)
	 ActivityHistory2[] GetProcessHistory2(string SessionId, string JobID, bool AssociatedJobs, short ActivityHistoryFilter, string ResourceIDForHistoryFilter)
	GetXMLMapControlJobDataOnly(string SessionId, string JobId)
	GetCRMURL(string SessionID, string Entity, string InstanceID)
	GetTrustedDomains()
	 VerifyNTUserandPassword(string UserName, string DomainName, string Password)
ProcessDefnManager	NodeInfo GetNodeInfo(NodeIdentity NodeIdentity)
	GetSkillLevelDetails(string ResourceId, string ProcessId, ref short SkillLeveI, ref string SkillName)
ResourceManager	ModifyHardwareResource(string ResourceId, string ResourceName, short PeriodType, double VarRate, double FixedRate, string CategoryId)

Class	Methods
	ModifySoftwareResource(string ResourceId, string ResourceName, short PeriodType, double VarRate, double FixedRate, string CategoryId)
	 AddSoftwareResource(string ResourceName, string ResourceId, short PeriodType, double VarRate, double FixedRate, string ServerId, string CategoryId)
	 AddHardwareResource(string ResourceName, string ResourceId, short PeriodType, double VarRate, double FixedRate, string ServerId, string CategoryId)
	• Singularity.Spp.ResourceManagerData.Resource[] GetHardwareGroups()
	NonHumanResourceInfo GetHardwareResourceInfo(string ResourceId)
	NonHumanResourceInfo GetSoftwareResourceInfo(string ResourceId)
	Singularity.Spp.ResourceManagerData.Resource[] GetSoftwareGroups()
	IsLoggedOn(string ResourceId)
	 UpdatePerformanceValues(string ResourceId, int TargetDuration, int ActualDuration)
	ResourcePerformanceValues GetPerformanceValues(string ResourceId)
	ResetLogonStatus()
	 AddNtGroup(string ResourceName, string NtGroupName, string DomainName, short GroupType, string ServerId)
	 AddBroadcastNote(string sessionId, string ownerId, string subject, string[] resourcesToBroadcastTo, string noteText)
	 BroadcastMessage(string sessionId, string ownerId, string subject, string messageText, string[] resourcesToBroadcastTo)
	 BroadcastMessageForActivity(string sessionId, string ownerId, string subject, string messageText, string jobId, short nodeId, short EPC, string[] resourcesToBroadcastTo)
	Synchronise(string RemoteServerId, short SyncStyle)
	Transfer(string ResourceId, short TransferAction, object DestinationResourceManager)
	DeleteResourcesofOrigin(string OriginId)
	VerifySynchronise(string DestinationServerID)
	UpdateLastActiveTime(string ResourceId, DateTime LastActiveTime)
	ActivityComplete(string ResourceId, int ExpectedDuration, int Duration)
	CancelActivity(string ResourceId, int Duration)
	BatchTransfer(string ServerId)
ServerDataManager	SolutionLanguage[] RetrieveSolutionLanguages(int solutionId)
	InstalledSystem[] GetInstalledSystems()
	IsCategoryInUse(string CategoryId)
VariablesManager	VariableWithCategory[] GetVariablesInCategory(string OwnerID, double Version, bool GetComplexVarsAsArray, string Category, string ResourceIDForCategory)