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## Introduction

This *Tech Note* outlines working with Wonderware Service Dependencies, which some of your Services can or must have configured. Dependencies are other components that must be initialized prior to your service starting. This document will explain where you go to view the list of Dependencies for a given Service, and then how to modify and create them.

Note: For information on specific systems and software, see the References section.

There are a number of situations where modifying or creating Dependencies for particular applications enable your services to start-up in a specific order. This can eliminate overload of resources at start-up due to multiple services attempting to start-up at the same time. Creating or modifying dependencies to stagger the start-up can help mitigate these issues. Service Dependencies allow you to automate start-up when you must have certain Services or Components start prior to your service.

**IMPORTANT:** This article contains information about modifying the registry. Serious problems can occur if you modify the registry incorrectly. Make sure that you follow these steps carefully.

Before you modify the registry, make sure to back it up and make sure that you understand how to restore the registry if a problem occurs. For information about how to back up, restore, and edit the registry, click the following article number to view the article in the Microsoft Knowledge Base: **322756 How to Back Up and Restore the Registry in Windows**.

**WARNING:** If you use Registry Editor incorrectly, you can cause serious problems that can require reinstallation of your operating system. Microsoft cannot guarantee that you can solve problems that result from using Registry Editor incorrectly. Use Registry Editor at your own risk.

## **Viewing Service Dependencies**

To view the Dependencies configured for a specific Service, go to either the **Services** tool or use the Registry Editor.

- 1. Start the Services tool using Control Panel/Administrative Tools.
- 2. Double-click the service you want information on.
- 3. Click the Dependencies tab.

General   Log On   Recovery Dependencies	
Some services depend on other services, system drivers or load order groups. If a system component is stopped, or is not running properly, dependent services can be affected. ArchestrA Bootstrap	
Network Connections Remote Procedure Call (RPC)	
Hemote Procedure Call (RPC)	
The following system components depend on this service:	
The following system components depend on this service:	_
The following system components depend on this service:	
The following system components depend on this service:	

FIGURE 1: VIEWING SERVICE DEPENDENCIES

4. Run the Registry Editor by clicking **Start/Run**, then typing **regedit** and clicking **OK**.

Run			? ×
	Type the name of a pro- Internet resource, and	gram, folder, doo Windows will ope	ument, or n it for you.
Open:	regedit		•
	ОК	Cancel	Browse

FIGURE 2: RUN REGEDIT

5. Browse to the registry subkey **HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\aaBootstrap** and examine the data contained in the **DependOnGroup** and **DependOnService** entries.



FIGURE 3: AABOOTSTRAP REGISTRY ENTRIES

Note: To view Service Keys make sure you are using the Tree and Data view. Modify the view in the View menu bar command.

## Creating & Modifying Service Dependencies

In this example we add a dependency to the Wonderware **AlarmDBLogger** Service. In this case it is dependent on the Wonderware SuiteLink Service.

Use the Registry Editor to add any dependency to a service.

First we will need to locate the service names for each of the services, since they are different than the display name.

**Note:** For steps on how to set up the AlarmDBLogger to run as a service, see AlarmDBLogger User's guide.

#### To locate the Service names

- 1. Start the Services from Control Panel/Administrative Tools.
- 2. Double-click on the Wonderware Alarm Logger Service.

ieneral   Log Or	n Recovery Dependencies					
Service name:	New_AlarmLogger					
Display <u>n</u> ame:	Wonderware Alarm Logger Service					
Description:	<u>^</u>					
Path to executa	ble:					
C:\Program File	s\Wonderware\InTouch\\wwalmlogger.exe					
Startup typ <u>e</u> :	Automatic					
Service status:	Started					
<u>S</u> tart	Stop Pause Resume					
You can specify	the start parameters that apply when you start the service					
nom here.						
Start parameters						

FIGURE 4: WONDERWARE ALARM LOGGER SERVICE PROPERTIES

Note the Service name (New\_AlarmLogger). You will need this name to locate the Registry key and to modify it.

- 3. Click on the **Dependencies** tab. Notice that there are no dependencies listed.
- 4. Click on the Cancel button.
- 5. From the Service list, locate and double-click the Wonderware SuiteLink Service.

onderware Sui	teLink Properties (Local Computer)					
General Log Or	n   Recovery   Dependencies					
Service name:	slssvc					
Display <u>n</u> ame:	Wonderware SuiteLink					
Description:	<u>^</u>					
Path to executa	ible:					
"C:\Program Fil	es\Common Files\ArchestrA\slssvc.exe''					
Startup typ <u>e</u> :	Automatic					
Service status:	Started					
<u>S</u> tart	Stop Besume					
You can specify from here. Start parameter	w the start parameters that apply when you start the service					
	OK Cancel Apply					

FIGURE 5: SERVICE NAME AND DISPLAY NAME

Take note of the Service name (**slssvc**). You will need this name to modify the Registry key for the Wonderware Alarm Logger service.

1. Click the Cancel button.

# Using the Registry Editor to Create the Dependency

Now that you know the Service Names, you can create the Dependency.

- 1. Click Start/Run, then type regedit and click OK.
- 2. Navigate to the registry subkey HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\New\_Alarmlogger.

🚮 Registry	y Editor			
<u>Eile E</u> dit	⊻jew Favorites <u>H</u> elp			
	😥 🦲 msftesqlIDX	Name	Туре	Data
	MSIServer	(Default)	REG_SZ	(value not set)
	🕀 🚞 mssmbios	ab DisplayName	REG_SZ	Wonderware Alarm Logger Service
	MSSQLSERVER	ErrorControl	REG_DWORD	0x00000001 (1)
	MSSQLServerADHelper	ab ImagePath	REG EXPAND SZ	C:\Program Files\Wonderware\InTouch\\wwalmlogger.exe
	MSSQLServerOLAPService	ab ObjectName	REG_SZ	LocalSystem
	E − msvsmon80	Start	REG DWORD	0x00000002 (2)
	🕑 🛄 Mup	Type	REG DWORD	0x00000110 (272)
		~~~~~~		
	🔁 📃 NdisTapi			
	🕀 🛄 NdisWan			
	Image: NDProxy			
	NetBIOS			
	NetBT			
	NetDDE			
	NetDDEdsdm			
	🗈 📃 Netlogon			
	🗈 📃 Netman			
	NetTcpPortSharing			
	🖻 🔄 New_AlarmLogger			
	Enum			
	- Security			

FIGURE 6: NEW\_ALARMLOGGER SUBKEY

3. Right-click the folder and select **New\Multi-String Value**.

Viewing, Creating and Modifying Service Dependencies in Windows Server 2003



FIGURE 7: MULTI-STRING VALUE

- 4. Name the Value **DependOnService**.
- 5. Right-click on **DependOnService** and click **Modify**.
- 6. Type in the value of the service name that you want this to depend on. In this example, type slssvc in the Value data field.

? ×
*
ΟK

FIGURE 8: TYPE SERVICE NAME IN VALUE DATA FIELD

7. Click **OK** and close the Registry editor. When you have successfully created a Service Dependency it is displayed on the **Dependency** tab in the Services' **Properties** dialog box.

onderwa	re Alarm Logger S	ervice Prop	erties (Loca	l Computer)	?
General	Log On Recovery	Dependenci	es		
Some se groups. depende	ervices depend on oth If a system componen ent services can be af	ier services, sy it is stopped, o ifected.	stem drivers o r is not runnin	or load order g properly,	
Wonder	ware Alarm Logger Se	rvice			
<u>T</u> his ser	vice depends on the f	ollowing syste	m component	s:	
+	Wonderware SuiteLi	ink			
L					
The follo	owina system compon	ents depend a	n this service	8	
i	(No Dependencies)			~	_
·					
	1	OK	Cance	al Ao	vla

FIGURE 9: SUITELINK DEPENDENCY FOR ALARM LOGGER SERVICE

### References

- Chapter 9, Recording Alarms into an Alarm Database, in the InTouch® HMI Alarms and Events Guide.
- Tech Note 279: How to View, Create and Modify Service Dependencies in Win 2000

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