Application Reporting Tool

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Application Reporting Tool

Help version 1.018

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Overview

The Application Reporting Tool is a technical support utility, available to Windows Administrators on the installation machine, that automates the process of gathering and archiving data for troubleshooting or identifying system issues. With the exception of identifying hardware and gathering general operating system information, the Application Reporting Tool only collects file and registry information that directly pertains to related applications. After report generation, the entire report archive is stored in a user-specified location and may be reviewed before sending to technical support.

For more information regarding what data is collected as part of an Application Report archive, see <u>Information</u> Included in an Application Report.

See Also: Generating an Application Report

Generating an Application Report

To create a report with the Application Reporting Tool:

1. Launch the **Application Report** tool as the Administrator.

	Open
	Move to OneDrive
	Open file location
•	Run as administrator
	Send to >
	Properties

 Select Basic, Basic + Crash, or Basic + Hang. Basic gathers all the normal troubleshooting information. If the application is experiencing crashes, use Basic + Crash. If the application is in a deadlocked state, use Basic + Hang. ((To use Advanced, see steps below.)

C Application Report	×
The Application Reporting Tool automates the process of gathering and archiving data for identifying and troubleshooting system issues. After report generation, the entire report archive is stored in a user-specified location and may be reviewed before sending to Technical Support.	
●Basic: Select to gather relevant information for archiving and troubleshooting.	
O Basic + Crash: All the basic information plus any crash dumps that have been created	ł.
O Basic + Hang: All the basic information plus process dumps of the UI and runtime.	
Advanced: Select to customize the collection of server logs, datastores, and process dumps. This creates an excessively large report and should only be used as instructed by Technical Support.	
< <u>B</u> ack <u>N</u> ext > Close	

- 3. Click Next >.
- 4. Review the information to be gathered. Click Next >.
- 5. Choose the location for the file to be saved and click **OK**.

6. The Application Reporting Tool collects the files, generates the archive, and displays a notification message on completion.



- 7. Click Close.
- 8. Browse to the archive in the output folder. Output archives are compressed using the ZIP format and follow the naming convention (UTC Time):

ARU_YEAR-MONTH-DAY_HOUR-MIN-SEC.zip

9. Send the file to Technical Support or extract the archive and browse the directory for the files of interest.

Advanced

1. Select Advanced to control how much detail to include and click Next.

Application Report	×
The Application Reporting Tool automates the process of gathering and archiving data for identifying and troubleshooting system issues. After report generation, the entire report archive is stored in a user-specified location and may be reviewed before sending to Technical Support.	
O Basic: Select to gather relevant information for archiving and troubleshooting.	
O Basic + Crash: All the basic information plus any crash dumps that have been created	I.
O Basic + Hang: All the basic information plus process dumps of the UI and runtime.	
Advanced: Select to customize the collection of server logs, datastores, and process dumps. This creates an excessively large report and should only be used as instructed by Technical Support.	
< <u>B</u> ack <u>N</u> ext > Close	

2. Choose the event logs and diagnostics to collect, as described in <u>Collecting Event Logs</u> and click **Next**.

C Application Report	×
Server Logs:	
Collect Event Log	
Collect OPC Diagnostics	
Communication Diagnostics uncollectable due to persistance mode. Modify to enable.	
ThingWorx Diagnostics uncollectable due to persistance mode. Modify to enable.	
< <u>B</u> ack <u>N</u> ext > Close	

3. Select content to include as described in Server Data and Crash Dumps.

C Application Report	×
Server App Data Content Include EFM Datastore Include Historian Datastore	
Process Crash Dumps Starting with Windows Server 2008 and Windows Vista with Service Pack 1, it is possible to configure Windows so that user-mode dumps are collected and stored locally after a user-mode application crashes. Click 'Enable Crash Dumps' to enable this functionality. Configure the crash dump location using the file path edit box below. To include these dumps in the Application Report, click 'Collect Crash Dumps'.	
Enable Crash Dumps C:\Temp\CrashDumps	
< <u>B</u> ack <u>N</u> ext > Close	

- 4. Click Next.
- 5. Select the processes for which to generate on-demand process memory dumps and click Next.
 For more information on process memory dumping, including when a memory dump is necessary, refer to Server Data and Crash Dumps.

টি A	opplication Report			\times
C	ollect Full Memory Dumps of Selected I	Processes		
	File Name server_admin.exe server_eventlog.exe server_runtime.exe config_api_service.exe Select All Clear	Product Name	Process ID 8416 11480 7236 9840	
		< <u>B</u> ack <u>N</u> ex	t > Close	

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6. The Application Reporting Tool generates a preview of the collected data for review. Verify the settings and click **Next** (or click **Back** to make changes before generating).

• For details regarding the information collected, see Information Included in an Application Report.

C Application Report	×
****************	~
System Info:	
Operating System: Windows 10 Enterprise Edition 64-bit OS Major Version: 10 OS Minor Version: 0 OS Build Number: 17763 Platform ID: 2 Product Type: 1 Service Pack: Suite Mask: 0x00000100, Remote Desktop Supported (1 Interactive Session) Virtualization: None Processor Architecture: 0x00000009 Number of processors: 4 Default UI language ID: 0x00000409, English - United States (en-us) Network Information:	
Name: Loopback Pseudo-Interface 1	~
<	>
< <u>B</u> ack <u>N</u> ext >	Close

7. Browse to and select the folder in which to save the report archive.

Browse For Folder		×
Save the output archive	to selected folder:	
>	Drivers	^
>	Examples	
	Help	
	Plugins	
>	Projects	
	Properties	
	Reports	
	schemas	~
Departs		
Eolder: Reports		
Make New Folder	OK Cancel	

8. Click **OK**.

9. The Application Reporting Tool collects the files, generates the archive, and displays a notification message on completion.



- 10. Click Close.
- 11. Browse to the archive in the output folder. Output archives are compressed using the ZIP format and follow the naming convention (UTC Time):

ARU_YEAR-MONTH-DAY_HOUR-MIN-SEC.zip

12. Send the file to Technical Support or extract the archive and browse the directory for the files of interest.

Collecting Event Logs

An application-specific, user-configurable event logging service is included in most products. The technical support team may request the logs generated by the service to better understand the error and any relevant diagnostic information provided by the product.

C Application Report	×
Server Logs:	
Collect Event Log	
Communication Diagnostics uncollectable due to persistance mode. Modify to enable.	
ThingWorx Diagnostics uncollectable due to persistance mode. Modify to enable.	
< <u>B</u> ack <u>N</u> ext > Close	

The Event Log collection interface is divided into two sections, allowing collection of server logs and LinkMaster logs. If either product is not installed, the section is disabled.

Server Logs

Four types of server logs are collectable:

- Collect Event Logs Records noteworthy occurrences at the server level.
- Collect OPC Diagnostics Records OPC events occurring between an OPC client and the server.
- Collect Communication Diagnostic Records record messages and events occurring between a driver and a device.
- Collect ThingWorx Diagnostics: Records native interface events and messages between the server, the CSDK, and the ThingWorx Platform.

LinkMaster Logs

• Collect Event Logs Records noteworthy occurrences at the server level.

Server Data and Crash Dumps

There are several choices that affect the size and completeness of the report.

Application Report	\times
Server App Data Content Include EFM Datastore Include Historian Datastore	
Process Crash Dumps Starting with Windows Server 2008 and Windows Vista with Service Pack 1, it is possible to configure Windows so that user-mode dumps are collected and stored locally after a user-mode application crashes. Click 'Enable Crash Dumps' to enable this functionality. Configure the crash dump location using the file path edit box below. To include these dumps in the Application Report, click 'Collect Crash Dumps'.	
Enable Crash Dumps C:\Temp\CrashDumps	
< <u>B</u> ack <u>N</u> ext > Close	

Server App Data Content

Many Windows applications leverage the Application Data directory as an area for storage of temporary or long-term files that do not require direct user interaction. The Application Reporting Tool collects this directory to provide technical support staff with a better understanding of the state of applications on the system. Plug-ins installed as part of the server product also use this space for storage. This information is not always needed by technical support, but can be included when necessary.

Include EFM Datastore: Server's EFM Suite stores its historical EFM (Electronic Flow Measurement) data within the Application Data directory. Selecting this option allows the collection of EFM content when collecting the Application Data directory. If no EFM content exists within Application Data, this selection has no effect.

Include Historian Datastore: The server's local "historian" plug-in may store its database in any location, including the Application Data directory. Selecting this option allows the collection of historian datastore files when collecting the Application Data directory. If no historian datastore exists within Application Data, this selection has no effect.

Process Crash Dumps

Windows Vista SP1/Server 2008 releases and higher provide the ability to generate process memory dumps automatically when a process crashes, providing valuable insight into the conditions leading to the crash.

The Application Reporting Tool configures the system to collect ONLY those dumps related to this particular vendor software.

Enable Crash Dumps: Sets / disables a system-wide registry key, notifying Windows to generate a process memory dump any time a process crashes. Within the text field, a default path of C:\Temp\CrashDumps is provided and may be changed to any location at any time.

Collect Crash Dumps: Process memory dumps related to vendor products that are stored in the selected path are collected as part of the Application Report archive. Within the archive, process memory dumps appear in the /CrashDumps folder of related products.

Note: Collecting process memory dumps require administrative privileges. If the system or authorized user does not have adequate privileges, the utility requests temporary elevation of rights to administrator level.

Information in an Application Report

As part of the Application Reporting Tool, many different pieces of information are included. Below is a list of some of the information and files collected as part of archive generation.

System

- Information Compiled:
 - Hardware Details
 - Operating System Details
 - Active and Disconnected Network Interfaces
 - Installed .NET Frameworks
 - DCOM State and Permissions
 - OPC Enum Service Details
 - Registered OPC Servers (as seen by OPC Enum)
- Files Copied:
 - bootstrap.log
 - Error log generated during the failure of any Windows installer application
 - <AppData>\Vendor\Common
 - Vendor Hardware Keys
 - <AppData>\FLEXnet
 - Vendor Licensing
 - Windows System Event Log File
 - Windows Application Event Log File

General Product

- Information Compiled:
 - Installed Components
 - A list of .exe and .dll files stored in the install directory of each product
 - Xi Wrapper (Server Only)
 - Product Registry Entries
 - HKEY_CURRENT_USER\SOFTWARE\<Vendor>\<Product>\V5
 - HKEY_LOCAL_MACHINE\SOFTWARE\<Vendor>\<Product>\V5

- HKEY_CLASSES_ROOT\AppID\<Product_CLSID>
- HKEY_CLASSES_ROOT\CLSID\<Product_CLSID>
- Product DCOM Configuration and Permissions
- Files Copied:
 - Trusted Storage Diagnostics
 - License details file generated by a product's "activation_client.exe"
 - Install Log
 - The log file generated by each product during installation and modification
 - (Optional) Event Log Files
 - Includes Event, OPC Diagnostics, Communication Diagnostics, and ThingWorx Native Interface logs See "Collecting Event Logs" on page 10
 - Application Data
 - Temporary and long-term storage for application specific files
 - Log files from the Program Files directory (RedundancyMaster Only)

Other

- (Optional) On-Demand Process Memory Dumps
 - See Server Data and Crash Dumps
- (Optional) Process Memory Crash Dumps
 - See Server Data and Crash Dumps

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