

# Application and Data Server (ADS/ADX)

#### Description

The Application and Data Server (ADS) and Extended Application and Data Server (ADX) are optional components of the Metasys® system that manage the collection and presentation of large amounts of trend data, event messages, operator transactions, and system configuration data. The ADX is a larger scale system than the ADS and runs on a server operating system to provide extended historical archiving and reporting capabilities. As Site Director, the ADS/ADX provides secure communication to a network of Network Automation Engines (NAEs), Network Control Engines (NCEs), and Network Integration Engines (NIEs).

The Site Management Portal User Interface (UI) of the ADS/ADX operates in a Web browser to provide flexible system navigation, user graphics, comprehensive alarm management, trend analysis, and summary reporting capabilities. With the Site Management Portal UI, you can efficiently manage occupant comfort and energy usage, quickly respond to critical events, and optimize control strategies. The ADS/ADX includes an Open Database Connectivity (ODBC) compliant database package for secure storage of historical and configuration data.

An optional interface called the Ready Access Portal UI provides an intuitive, task-based user experience designed for building tenants and other specialized users.

In this document, the term engine refers to NAEs, NCEs, and NIEs, unless otherwise noted.

Refer to the *Application and Data Server (ADS/ADX) Product Bulletin (LIT-1201525)* for important product application information.

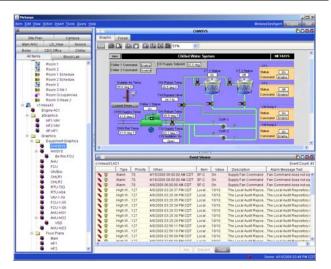
#### Features

- · Support of IT Standards and Internet Technologies
- Secure User Access
- Flexible System Navigation and Dynamic User Graphics
- Alarm and Event Management
- Long-Term Trend Data Storage
- Optional Metasys Advanced Reporting System and Energy Essentials

#### Applications

An ADS is used when:

- the number of engines becomes larger than a single engine can handle efficiently as Site Director
- long-term historical data storage needs exceed the capacity of a typical engine
- the number of simultaneous users logging on exceeds the capacity of a single engine. The ADS supports up to 5 simultaneous users.
   An ADX is used when:
- the Metasys Advanced Reporting System, Energy Essentials, or the Metasys for Validated Environments (MVE), Extended Architecture application is required
- You need to support more than 5 simultaneous users. The ADX supports 10 or 25 users.
- any one of your data storage or access requirements is not met by an ADS



**ADS/ADX Site Management UI** 

#### **Selection Chart**

Code Number	Description
MS-ADS05U-0	ADS new project software for up to 5 concurrent users
MS-ADX10U-0	ADX new project software for up to 10 users
MS-ADX10SQL-0	ADX new project software for up to 10 users Includes Microsoft® SQL Server™ 2008 software with a Processor License for unlimited users/devices.
MS-ADXSWO-0	ADX new project software for up to 25 users
MS-ADXSWOSQL-0	ADX new project software for up to 25 users Includes Microsoft SQL Server 2008 software with a Processor License for unlimited users/devices.



## Application and Data Server (ADS/ADX) (Continued)

### **Technical Specifications**

Application and Data Server (ADS) System Requirements		
Recommended Computer Platform <sup>1</sup>	<ul> <li>2.8 GHz Pentium® 4 processor with 80 GB hard disk</li> <li>(2.0 GHz Pentium 4 processor with 40 GB hard disk minimum)</li> <li>20 GB free space on the hard disk (drive C) after installing all prerequisite software and before installing the ADS software DVD drive</li> <li>Note: Prerequisite software includes the supported OS, database software, .NET Framework, and any other software or service packs required for your ADS configuration.</li> </ul>	
Recommended Memory	2 GB RAM minimum	
Supported Operating Systems <sup>2</sup> and Database Software	Microsoft® Windows® 7 OS Professional, Enterprise, and Ultimate Editions (32-bit) with SP1 (Includes Microsoft IIS Version 7.5) Supports Microsoft SQL Server™ 2008 R2 Express software (32-bit), SQL Server 2008 Express software with SP2 (32-bit), or SQL Server 2005 Express software with SP3 (32-bit)	
	Microsoft Windows XP® OS Professional Edition (32-bit) with SP3 (Includes Microsoft IIS Version 5.1) Supports Microsoft SQL Server 2008 R2 Express software (32-bit), or SQL Server 2008 Express software with SP2 (32-bit), or SQL Server 2005 Express software with SP3 (32-bit)	
Required Web Browser Software for Metasys Client Computers	Microsoft Internet Explorer® Version 6.x, 7.0, or 8.0 Java® Runtime Environment (JRE) 1.6.0_23 Note: When browsing to the UI of a Metasys system device, the OS on the client computer must be supported by the Metasys release loaded on the device. You may be unable to browse to Metasys system devices if the client OS is not supported. Refer to the <i>Requirements for Site Management Portal Client Computer</i> section of the <i>Metasys System Extended Architecture Overview</i> <i>Technical Bulletin (LIT-1201527)</i> for more information.	
Network Communication	Ethernet network interface card 10/100/1000 Mbps (100 Mbps or better recommended) Note: The ADS supports only one network interface card.	
Additional Software Included with the ADS	CCT software Export Utility software Metasys Database Manager software Microsoft .NET Framework Version 3.5 SP1 Microsoft SQL Server 2008 R2 Express software Microsoft SQL Server 2008 Express software with SP2 Microsoft SQL Server 2005 Express software with SP3 Ready Access Portal software SCT software SCT Manager software Note: The Microsoft Windows 7 OS includes Microsoft .NET Framework Version 3.5.1 which is built into the operating system (no separate software installation is necessary).	
Optional Hardware	Any network or local printer supported by the qualified Windows operating system	

1. Our computer platform and memory recommendations are not meant to imply that older or slower machines are not usable. Refer to the Network and IT Guidance for the BAS Professional Technical Bulletin (LIT-12011279) for more information regarding computer/server recommendations.

2. Refer to the Network and IT Guidance for the BAS Professional Technical Bulletin (LIT-1201279) for specific Microsoft Windows OS settings that may be required for your Metasys system configuration.



## Application and Data Server (ADS/ADX) (Continued)

	Extended Application and Data Server System Requirements (Unified ADX Systems)
Recommended Server Platform <sup>1</sup>	<ul> <li>2.8 GHz Pentium® 4 processor with 160 GB hard disk</li> <li>(2.0 GHz Pentium 4 processor with 80 GB hard disk minimum)</li> <li>40 GB free space on the hard disk (drive C) after installing the prerequisite software and before installing the ADX software DVD drive</li> <li>Note: ADX prerequisite software includes the Windows OS and SQL Server software, Windows .NET Framework, Java Runtime Environment software, and any other software or SPs required by your ADX configuration.</li> </ul>
Recommended Memory	4 GB RAM minimum
Supported Operating Systems <sup>2</sup> and Database Software <sup>3</sup>	Microsoft Windows Server 2008 R2 OS (64-bit) (Includes Microsoft IIS Version 7.5) Supports Microsoft SQL Server™ 2008 R2 Standard and Enterprise software (64-bit) or Microsoft SQL Server 2008 Standard or Enterprise software with SP1 (64-bit)
	Microsoft Windows Server 2008 OS (32-bit) with SP2 (Includes Microsoft IIS Version 7.0) Supports Microsoft SQL Server 2008 R2 Standard and Enterprise software (32-bit), SQL Server <sup>™</sup> 2008 Standard and Enterprise software with SP2 (32-bit), or SQL Server <sup>™</sup> 2005 Standard and Enterprise software with SP3 (32-bit)
	Microsoft Windows Server 2003 R2 OS (32-bit) with SP2 (Includes Microsoft IIS Version 6.0) Supports Microsoft SQL Server 2008 R2 Standard and Enterprise software (32-bit), SQL Server™ 2008 Standard and Enterprise software with SP2 (32-bit), or SQL Server™ 2005 Standard and Enterprise software with SP3 (32-bit)
Required Web Browser Software for Metasys Client Computers	Microsoft Internet Explorer® Version 6.x, 7.0, or 8.0 Java® Runtime Environment (JRE) 1.6.0_23 Note: When browsing to the UI of a Metasys system device, the OS on the client computer must be supported by the Metasys release loaded on the device. You may be unable to browse to Metasys system devices if the client OS is not supported. Refer to the <i>Requirements for Site Management Portal Client Computer</i> section of the <i>Metasys System Extended Architecture Overview Technical Bulletin (LIT-1201527)</i> for more information.
Network Communication	Ethernet network interface card 10/100/1000 Mbps (100 Mbps or better recommended) Note: The ADX supports only one network interface card.
Additional Software Included with the ADX	CCT software <sup>4</sup> Export Utility software Metasys Advanced Reporting System Metasys Database Manager software Microsoft .NET Framework Version 3.5 SP1 or 3.5.1 (Windows Server 2008 R2 software) Ready Access Portal software SCT software SCT Manager software Note: The Metasys Advanced Reporting System requires an ADX. The SCT software must be installed on the ADX.
Optional Hardware	Any network or local printer supported by the qualified Windows operating system

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2. Refer to the Network and IT Guidance for the BAS Professional Technical Bulletin (LIT-1201279) for specific Microsoft Windows OS settings that may be required for your Metasys system configuration.

3. You must purchase a SQL Server software license for each individual processor you have. You do not need to purchase multiple licenses if you have a single processor divided into multiple cores. For example, if you have a single processor with dual cores, purchase one license for SQL Server software.

4. We support CCT software on 32-bit operating systems only (excludes Windows Server 2008 R2 OS [64-bit]).



### Application and Data Server (ADS/ADX) (Continued)

	Extended Application and Data Server System Requirements (Split ADX Systems)		
Recommended Server Platform <sup>1</sup>	Web/Application Server 2.8 GHz Pentium® 4 processor with 160 GB hard disk (2.0 GHz Pentium 4 processor with 80 GB hard disk minimum) DVD drive 200 MB free space on the hard disk (drive C) after installing the prerequisite software <sup>2</sup> and before installing the ADX software		
	Database Server 2.8 GHz Pentium 4 processor with 160 GB hard disk (2.0 GHz Pentium 4 processor with 80 GB hard disk minimum) DVD drive 40 GB free space on the hard disk (drive C) after installing the prerequisite software <sup>2</sup>		
	SCT Computer In a split configuration, you cannot install SCT software on either the Web/Application Server computer or the Database Server computer. Refer to the System Configuration Tool Catalog Page (LIT-1900198) for current SCT computer requirements.		
Recommended Memory	4 GB RAM minimum		
Supported Operating Systems <sup>3, 4</sup> with Supported Database Software <sup>5</sup>	Microsoft Windows Server 2008 R2 OS (64-bit) (Includes Microsoft IIS Version 7.5) Supports Microsoft SQL Server™ 2008 R2 Standard and Enterprise software (64-bit) or Microsoft SQL Server 2008 Standard or Enterprise software with SP1 (64-bit)		
	Microsoft Windows Server 2008 OS (32-bit) with SP2 (Includes Microsoft IIS Version 7.0) Supports Microsoft SQL Server 2008 R2 Standard and Enterprise software (32-bit), SQL Server <sup>™</sup> 2008 Standard and Enterprise software with SP2 (32-bit), or SQL Server <sup>™</sup> 2005 Standard and Enterprise software with SP3 (32-bit)		
	Microsoft Windows Server 2003 R2 OS (32-bit) with SP2 (Includes Microsoft IIS Version 6.0) Supports Microsoft SQL Server 2008 R2 Standard and Enterprise software (32-bit), SQL Server™ 2008 Standard and Enterprise software with SP2 (32-bit), or SQL Server™ 2005 Standard and Enterprise software with SP3 (32-bit)		
Required Web Browser Software for Metasys Client Computers	Microsoft Internet Explorer® Version 6.x, 7.0, or 8.0 Java® Runtime Environment (JRE) 1.6.0_23 Note: When browsing to the UI of a Metasys system device, the OS on the client computer must be supported by the Metasys release loaded on the device. You may be unable to browse to Metasys system devices if the client OS is not supported. Refer to the <i>Requirements for Site Management Portal Client Computer</i> section of the <i>Metasys System Extended Architecture Overview Technical</i> <i>Bulletin (LIT-1201527)</i> for more information.		
Network Communication	Ethernet network interface card 10/100/1000 Mbps (100 Mbps or better recommended) Note: The ADX supports only one network interface card.		
Additional Software Included with the ADX	CCT software <sup>6</sup> Export Utility software Metasys Advanced Reporting System Metasys Database Manager software Microsoft .NET Framework Version 3.5 SP1 Ready Access Portal software SCT software SCT software SCT Manager software Note: The Metasys Advanced Reporting System requires an ADX. The SCT computer must be online and accessible to the ADX at all times.		
Optional Hardware	Any network or local printer supported by the qualified Windows operating system		

1. Our computer platform and memory recommendations are not meant to imply that older or slower machines are not usable. Refer to the Network and IT Guidance for the BAS Professional Technical Bulletin (LIT-12011279) for more information regarding computer/server recommendations.

Guidance for the BAS Professional Technical Bulletin (LTI-12011279) for more information regarding computer/server recommendations.
 ADX prerequisite software includes the Windows OS and SQL Server software, Windows .NET Framework, and any other software or service packs required for

your ADX configuration.

3. The Web/Application and Database servers must have the same OS installed.

4. Refer to the Network and IT Guidance for the BAS Professional Technical Bulletin (LIT-1201279) for specific Microsoft Windows OS settings that may be required for your Metasys system configuration.

5. You must purchase a SQL Server software license for each individual processor you have. You do not need to purchase multiple licenses if you have a single processor divided into multiple cores. For example, if you have a single processor with dual cores, purchase one license for SQL Server software.

6. We support CCT software on 32-bit operating systems only (excludes Windows Server 2008 R2 OS [64-bit]).