

Experion eServer Specification



EP03-230-301

Release 301

April 2007, Version 2.0

Revision History

Revision	Date	Description
1.0	August 2006	Release publication
2.0	April 2007	Updated for R301

Table of Contents

1.	Product Introduction.....	1
1.1.	Experion System.....	1
1.2.	Architecture Overview.....	1
1.3.	Experion eServer Overview.....	2
2.	Specifications.....	3
2.1.	Client Sizing.....	3
2.2.	Database Sizing.....	3
2.3.	Display Types.....	4
2.4.	Experion eServer Data Subscribing performance.....	4
2.5.	Experion eServer interoperability.....	4
3.	Hardware and Software Requirements.....	5
3.1.	Experion eServer Computer Requirements.....	5
3.2.	Experion eServer Standard Access Client Computer Requirements.....	6
3.3.	Experion eServer Premium Access Client Computer Requirements.....	6
4.	Model Numbers.....	7
4.1.	Experion eServer Base Software.....	7
4.2.	Options.....	7

This page is intentionally blank.

1. Product Introduction

1.1. Experion System

The Experion Process Knowledge System (PKS) is Honeywell’s unified control system for process, business, and asset management that helps industrial manufacturers increase their profitability and productivity. Experion takes customers well beyond distributed control system (DCS) functionality with an advanced automation platform solution and innovative application integration to improve business performance and peace of mind.

1.2. Architecture Overview

The Experion platform comprises many different integrated hardware and software solutions depending upon the needs of the application. The pictured architecture is a representation of many of the possible nodes that can be used in the Experion architecture. Note that the architecture is highly scalable and not all nodes are necessary or required.

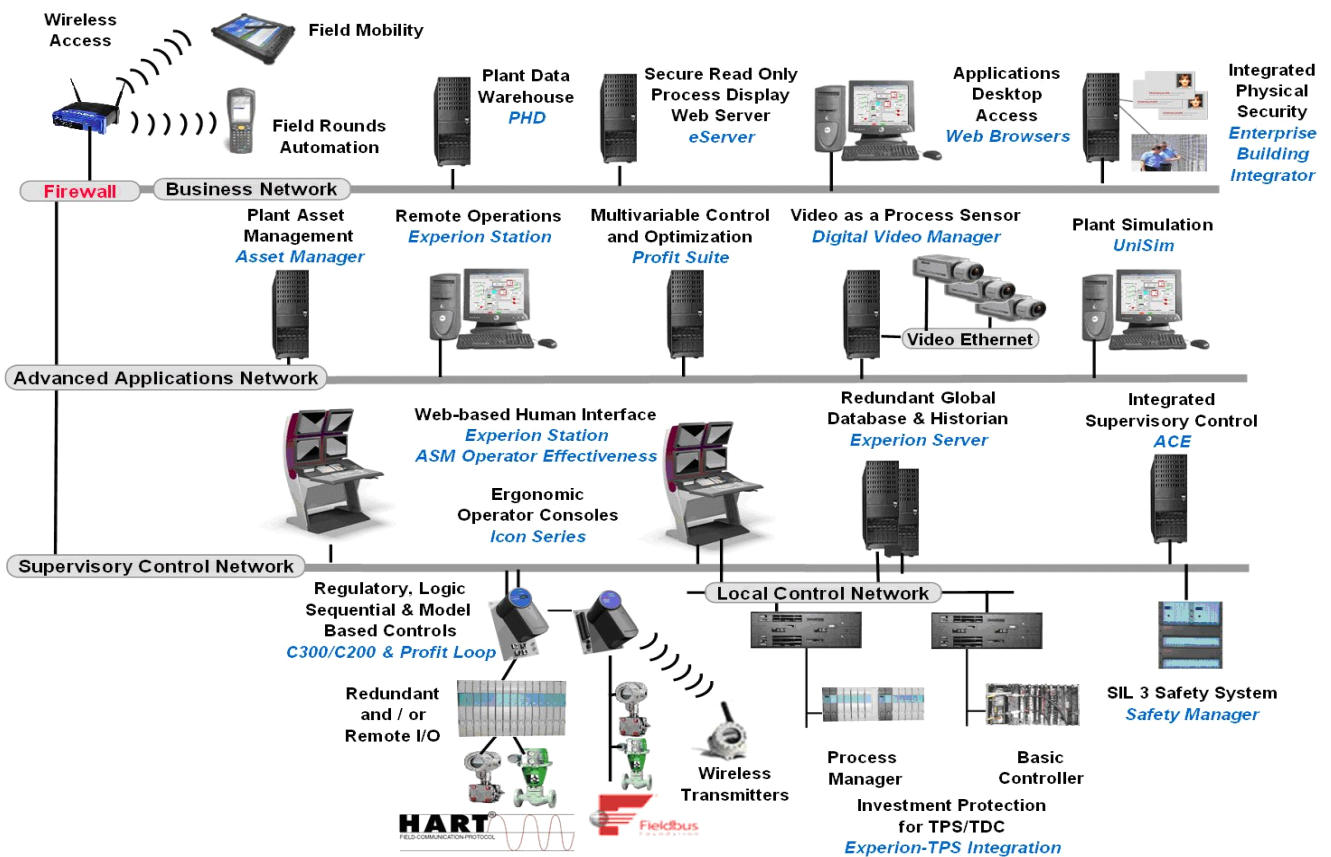


Figure 1. Sample Experion architecture

1.3. Experion eServer Overview

Experion eServer provides secure browser-based access to Experion process displays from any location on the business network. Access is always view-only, and alarms and events are blocked from view. Experion custom graphics require no display translation or conversion, and corresponding Experion points are discovered automatically, reducing deployment and change management costs. Experion eServer protects and preserves the integrity of the process control environment by focusing casual users towards a single access point and isolating process control network from the business network. One or more Experion servers are required for eServer.

Standard Access Clients	
Description	Experion eServer standard access is a zero footprint solution that enables secure casual access to Experion custom displays.
Details	<ul style="list-style-type: none"> • Users can view Experion custom displays using any type of Web browser, independent of client hardware configuration or operating system. Users do not need to download or install additional software. • Users are provided with a static "snapshot" of the custom display. Users are limited to using simple navigation controls on the pages. Users can request an update of the display by using the browser refresh command. • Standard access clients are not licensed, enabling hundreds of casual users to access the Experion eServer as needed. • eServer standard access clients view cached custom displays. The cache time is the time that the display page is kept and served to users. When a page older than the cache time is requested, an updated page is served. Setting longer cache times allows the eServer to serve hundreds of users. If used to provide a frequently updating view of large amount of process data, 10-20 users may be served.

Premium Access Clients	
Description	Experion eServer premium access provides a secure dynamic browser connection that displays live updating Experion custom displays, trends and reports within Microsoft's Internet Explorer (IE).
Details	<ul style="list-style-type: none"> • Users can view Experion custom displays using Internet Explorer. Users need to download a small plug-in to Internet Explorer that enables premium access features such as automatic refresh and support of Experion custom display dynamics. • Premium access clients are configured with a rotary connection, enabling numerous casual users to access the Experion eServer as needed, which is advantageous from a licensing point of view. For example when 38 Premium Access connections are configured, 38 connections can be established at one time but the software could be installed and be available to many more than 38 individual clients.

2. Specifications

2.1. Client Sizing

Station and Server Type	Maximum
Premium Access Clients	38
Standard Access Clients	Unlimited

2.2. Database Sizing

Item	Specification	Comments
Maximum number of remote data access points	65,000	<ul style="list-style-type: none"> Experion eServer connects to one or more Experion servers to view points, using DSA. Experion eServer enables access to real-time and historical data. Remote Data Access Points are created whenever a point is accessed using DSA that belongs to another server. Remote Data Access Points are not licensed.
Maximum number of DSA-connected servers	14	Experion eServer connects to up to 14 Experion servers.

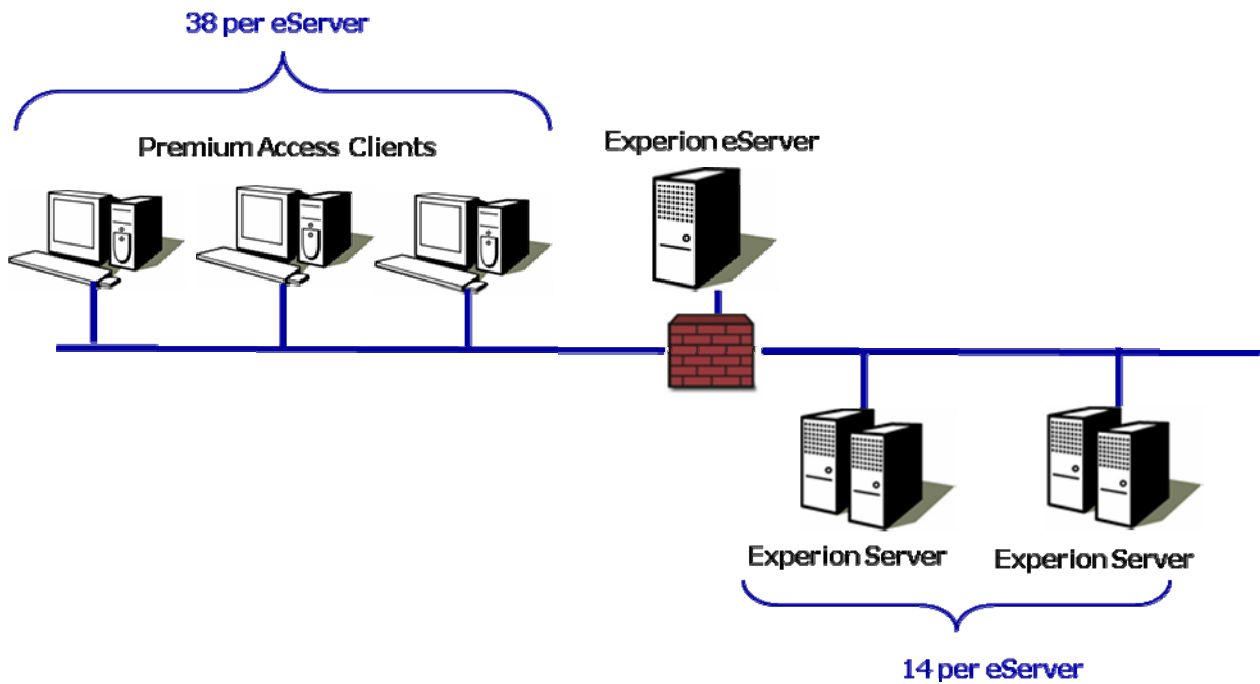


Figure 2. eServer sizing limits

2.3. Display Types

Display Type Specifications	Specification
Standard Access Clients ^{1,2}	Experion custom displays
Premium Access Clients ^{1,3}	<ul style="list-style-type: none"> • Experion custom displays • Experion trends • Experion reports
<p>Note 1 – Access to alarms and events is blocked and graphics do not show alarm status information.</p> <p>Note 2 – Experion custom displays are presented in a view-only, non-interactive format; controls that require interaction with the host system such as combo boxes do not work. Embedded simple hyperlinks and push buttons including simple hyperlinks are supported.</p> <p>Note 3 – Experion custom displays, trends and reports are presented in a view-only format. Because Windows Explorer is used instead of the Station environment, some limitation compared to Station apply and detail displays, faceplates, chart visualization, alarm and event summaries, system status displays, configuration displays, groups and other operational functions are not supported.</p>	

2.4. Experion eServer Data Subscribing performance

From a networking point of view, an eServer is a separate server in an Experion Distributed System Architecture (DSA) system. The following specifications apply to the network between the eServer and Experion server(s).

Available Network Bandwidth ¹	Maximum Network Throughput (Parameters per Second) ²	Maximum Publishing Experion Servers
64 Kbps	100	1
128 Kbps	200	2
256 Kbps	400	4
512 Kbps	800	6
1 Mbps	1,000	8
2 Mbps	2,000	9
10 Mbps	10,000	9
100 Mbps	100,000	9
<p>Note 1 – “Available Network Bandwidth” means dedicated continuously available bandwidth for DSA use between eServer and the Experion server(s).</p> <p>Note 2 – Maximum traffic on any individual network segment.</p>		

2.5. Experion eServer interoperability

Distributed System Architecture interoperability is defined as a DSA-based runtime connection between Experion eServer and the Experion server(s). eServer uses DSA to get data from Experion servers, so if different Experion versions are being used only those that support DSA interoperability are supported. To share display files eServer must be at the same release as (or at a more recent release than) the Experion servers.

Experion eServer Release	Can interoperate with			
	Experion R301?	Experion R210.0?	Experion R201.0?	Experion R101.0?
eServer R301	Yes	Yes	Yes	No
Differences between releases need to be taken into account. DSA interoperability does not include interoperability of Configuration Studio engineering tools such Quick Builder and Enterprise Model Builder.				

3. Hardware and Software Requirements

3.1. Experion eServer Computer Requirements

A computer must meet the following specifications to be used as an Experion eServer. These guidelines are intended to provide a minimum baseline. Honeywell computer platforms meet these specifications but may not necessarily be the example platforms listed below. Honeywell computers carry full support as a qualified offering. For installation information on computer platforms, including physical, electrical, corrosion, and other environmental requirements, please consult Honeywell installation guides.

Minimum Experion eServer Platform – This is the minimum computer platform necessary to run the Experion eServer components. It can be used for small configurations that may consist of 1 Premium Access client and up to 3,000 points.

Standard Experion Server Platform – This is the typical computer platform capable of running Experion eServer components. Configurations can support up to 12 concurrent Premium Access clients and up to 10,000 points.

Performance Experion Server Platform – This computer platform is used for applications with more than 12 concurrent Premium Access clients or more than 10,000 points.

System Configuration	Minimum	Typical	Performance
Processor	Dual 2 GHz Xeon or faster	Dual 3.4 GHz Xeon or faster	Dual 2.66 GHz Xeon dual core or faster
RAM ¹	1 GB	2 GB	3 GB
Video resolution	1024 x 768, 65K colors		
Hard drive	80 GB	80 GB	160 GB
Video RAM	8 MB	8 MB	16 MB
Operating system	Windows 2003 Server SP1 (32-bit)		
Example platforms ²	MZ-PCSV10 (based on Dell PE1430SC dual CPU) MZ-NTPC51, -81 (based on Dell PE1800, dual CPU) MZ-NTPC05 (based on Dell PE 1800, dual CPU)	MZ-PCSV10 (based on Dell PE1430SC dual CPU) MZ-NTPC51, -81 (based on Dell PE1800, dual CPU) MZ-NTPC07 (based on Dell PE 2600, dual CPU)	MZ-PCSV20, -30 (based on Dell PE2900 dual CPU) MZ-PCSV50 (based on Dell PE2950 dual CPU) MZ-NTPC71 (based on Dell PE2850, dual CPU)
Note 1 – For better performance, additional RAM can be added, up to a maximum of 3 GB.			
Note 2 – For specifications and further information on Honeywell computer platforms, please contact your Honeywell representative.			

3.2. Experion eServer Standard Access Client Computer Requirements

There are no minimum system requirements for eServer Standard Access clients. A client needs a standard Web browser to view the Standard Access client pages. Clients can be of any type of hardware and operating system including office desktops, off-the-shelf PDAs, hand-held and mobile devices etc, making eServer Standard Access the most versatile Experion client.

System Configuration	Minimum
Browser type	Any browser type
Networking	Any network connection, including low bandwidth connections

3.3. Experion eServer Premium Access Client Computer Requirements

A computer must meet the following specifications to be used as an Experion eServer Premium Access client. These guidelines are intended to provide a minimum baseline.

System Configuration	Minimum
Processor	3.0 GHz Pentium IV or faster
Browser type	Microsoft Internet Explorer 6
RAM	512 MB
Networking ¹	100 Mbps Ethernet
Video resolution	1024 x 768 or 1280 x 1024 (standard) 65K colors
Video memory (VRAM) per channel	32 MB
Operating system	Windows XP SP2 Professional (32-bit)
Hard drive	20 GB
Example platform ²	MZ-NTPC63 (based on Dell Precision WS470) MZ-NTPC31, MZ-NTPC32 (based on Dell Precision WS360, WS370)
Note 1 – 10 Mbps Ethernet network between the Experion eServer and Premium Access clients is not officially supported, although it may perform acceptably on small systems.	
Note 2 – For specifications and further information on Honeywell computer platforms, please contact your Honeywell representative.	

4. Model Numbers

4.1. Experion eServer Base Software

Model Number	Description
EP-EBASE1 ¹	eServer Base Package

Note 1 – Experion eServer base software includes 1 Quick Builder license, 1 Display Builder license, DSA connections to 14 Experion Servers, 1 Flex Station for administration purposes and unlimited Standard Access clients.

4.2. Options

Model Number	Description
EP-ESPREM	eServer Premium Access, per user
EP-TDSPBD	Experion Display Builder

Experion™ is a trademark of Honeywell International Inc..

All other products and brand names shown are trademarks of their respective owners.

This document contains Honeywell proprietary information. It is published for the sole usage of Honeywell Process Solutions' customers and prospective customers worldwide. Information contained herein is to be used solely for the purpose submitted, and no part of this document or its contents shall be reproduced, published, or disclosed to a third party without the express permission of Honeywell International Inc..

While this information is presented in good faith and believed to be accurate, Honeywell disclaims the implied warranties of merchantability and fitness for a particular purpose and makes no express warranties except as may be stated in its written agreement with and for its customer.

In no event is Honeywell liable to anyone for any indirect, special or consequential damages. The information and specifications in this document are subject to change without notice.

For More Information

To learn more about how Honeywell's Experion eServer, visit our website www.honeywell.com/ps or contact your Honeywell account manager.

Automation & Control Solutions

Process Solutions

Honeywell

2500 W. Union Hills Dr.

Phoenix, AZ 85027

Tel: 877.466.3993 or 602.313.6665

www.honeywell.com/ps

EP03-230-301
April 2007
© 2007 Honeywell International Inc.

The Honeywell logo, consisting of the word "Honeywell" in a bold, red, sans-serif font.