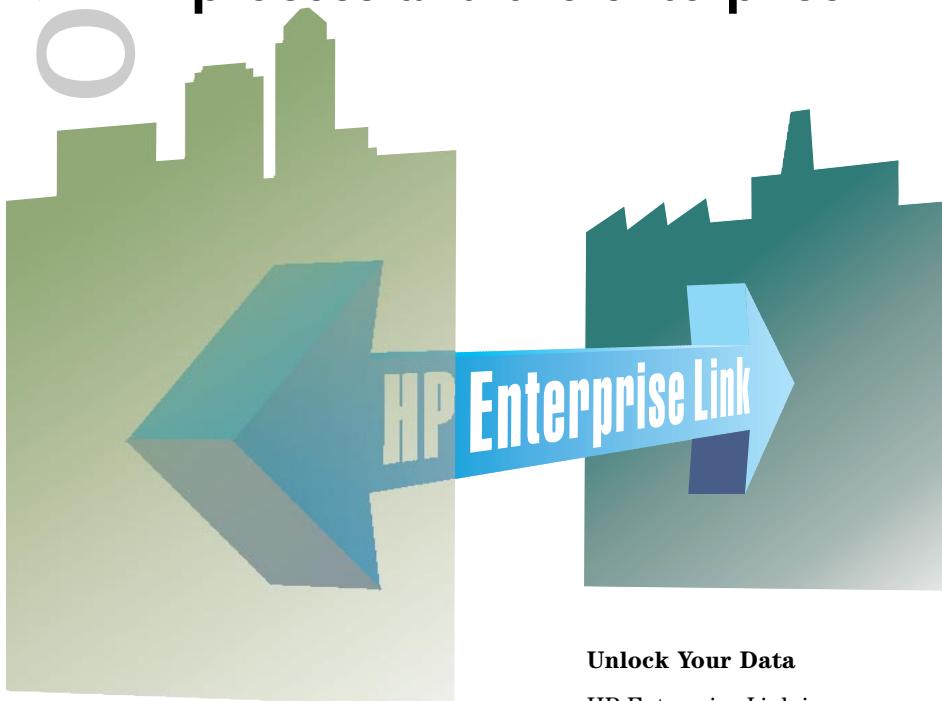


HP Enterprise Link for HP-UX HP E2700BA
HP Enterprise Link for Windows NT[®] HP E2702BA

The catalyst for real-time information exchange between your industrial process and the enterprise



Real-time data is often a neglected asset, locked away in your automation systems. Releasing the information trapped inside your industrial process, and letting it flow within operations and to the enterprise, gives you the agility to keep pace with your customers.

HP Enterprise Link is the catalyst for an agile response to changing demand. It integrates information both vertically and horizontally, putting data where it's needed, when it's needed. The result is a synergy between process and enterprise that boosts the return from your most important asset: your customers.

Unlock Your Data

HP Enterprise Link is a middleware integration solution that unlocks your process data and lets it flow between any mix of plant applications, industrial process systems and enterprise resource planning systems. Free-flowing process information gives you many opportunities to optimize your assets:

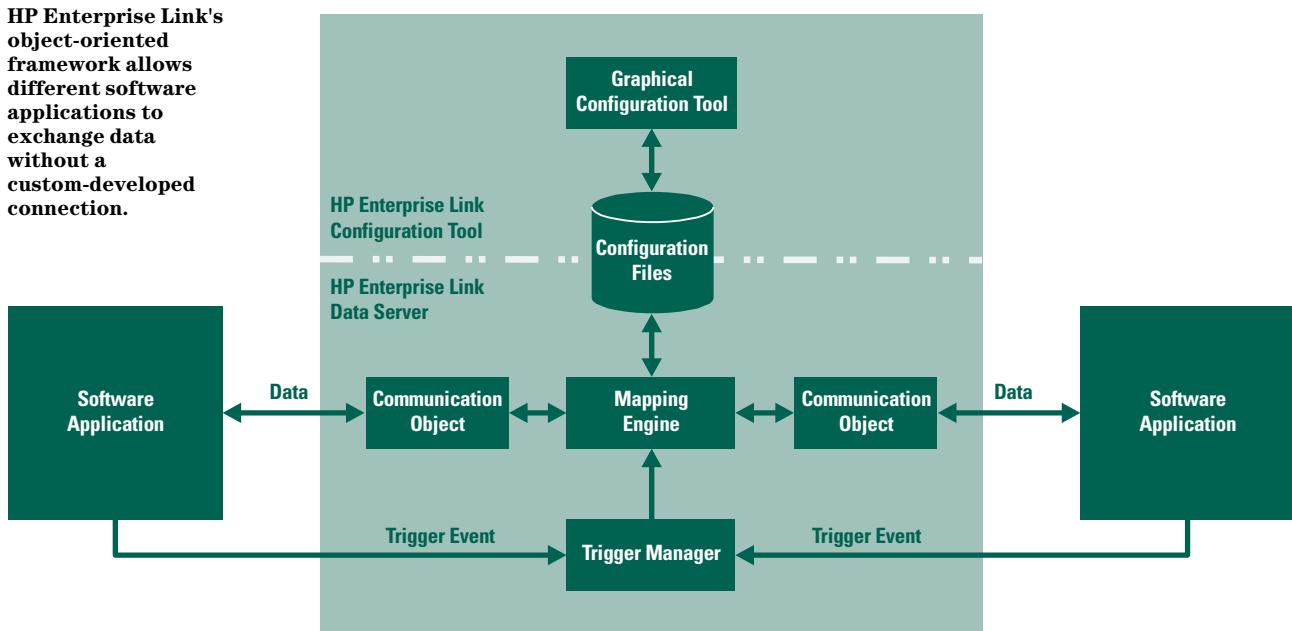
- reduce inventory levels and working capital requirements by linking production data to order fulfillment
- increase up time and yield by linking equipment usage data to maintenance transactions
- reduce cycle time by linking quality management to process data

HP Enterprise Link is a proven performer in a variety of manufacturing industries all over the world:

- chemical
- pharmaceutical
- petroleum
- food and beverage
- metals and mining

HP's innovative middleware framework uses commercially available software modules called *communication objects* to connect applications that otherwise could not exchange data without a custom-developed connection. Creating such a connection yourself can quickly consume scarce time and resources, and tends to produce a solution that isn't able to grow and evolve with your business.

HP Enterprise Link's object-oriented framework allows different software applications to exchange data without a custom-developed connection.



HP Enterprise Link is inherently flexible: it can be molded to accommodate immediate *and* future needs. Additionally, an object-oriented design reduces the initial development time and costs of implementing a process-to-enterprise integration solution. And HP Enterprise Link is supported globally by Hewlett-Packard, ensuring simple and inexpensive maintenance.

Together with the communication objects, HP Enterprise Link's graphical configuration tool and robust data server make up a software package that lets you:

- tie data sources to their corresponding destinations by pointing and clicking, or by using powerful dynamic mapping procedures
- turn complex data structures into simple, hierarchical tree views
- trigger data exchange automatically using a flexible set of time- and event-based trigger criteria
- spool data for protection from network problems
- trace the movement of data
- use a web browser to diagnose data exchange problems

Configure Data Flow Visually

A graphical configuration tool gives you an intuitive interface for all aspects of setting up and using HP Enterprise Link. One important feature of the configuration tool is its ability to distill complex data structures into a hierarchical tree view. Use this tree view to select a data source and its destination visually. Or, use powerful procedures that match multiple sources to their destinations in a single step. The ability to export and import mappings to and from text files ensures maximum reuse from your work.

You can also manipulate data values, writing a different value to the destination than was read from the source. Built-in transformation procedures adapt data as it moves between different time zones and different units of measurement. This flexible feature lets your process and enterprise systems operate uniformly in different locations, with HP Enterprise Link—not a system operator—bridging any gaps.

In addition to graphical data mapping and data manipulation, the configuration tool helps you connect

to applications, specify triggers, set up spooling and data tracing, diagnose problems, and assess real-time performance—all visually.

Execute Data Exchange Reliably

The runtime data server is a stable, reliable performer that shepherds data between applications, using the mappings and triggers specified visually with the configuration tool.

Data exchange is triggered at a specific time or by application events such as an order from an SAP system, or an update in a plant database. Once you've set these triggers in the configuration tool, the data server can pass data from one application to another on cue, working smoothly without operator intervention. Even if a network failure occurs, the data server continuously spools incoming and outgoing data, ensuring that data flow resumes automatically when the network connection is restored.

The data server can also trace errors and data reads and writes, giving you a useful log for testing HP Enterprise Link's connections.

Extend HP Enterprise Link Anywhere

HP Enterprise Link's real strength is its ability to extend wherever you need it to go. Whether you use a communication object available commercially from HP, or one of HP's many Solution Partners—or if you require a communication object tailored to your applications—Hewlett-Packard has the resources to help you move forward with confidence.

Since HP Enterprise Link's first release in 1996, HP has greatly expanded its stock of commercially available communication objects. HP now offers ready-made connections to:

- SAP R/3: logistics modules such as PP-PI, PM, PP, QM and MM, as well as hooks into SD and FI/CO
- Oracle
- Microsoft SQL Server
- Wonderware IndustrialSQL Server
- HP RTAP
- text files

Adding to this selection, HP's Solution Partners have developed communication objects for commercial process applications from vendors such as ABB, Elsag Bailey, Fisher-Rosemount, Gensym, Honeywell, OSI, Wonderware and others.

To help you plan and implement your process-to-enterprise integration, or to help tailor a communication object to your application, HP can recommend an experienced service provider, and even provide consultation with our own HP Enterprise Link experts. Another source for great information is the annual user group conference, which gives you the opportunity to hear and talk about best practices and proven solutions.

Add the Catalyst for Data Flow

HP Enterprise Link, when added to any mix of process and enterprise systems, is the catalyst for data flow. By giving your real-time data the freedom to move where it's needed, when it's needed, HP Enterprise Link opens a new frontier in asset reuse and optimization. The result is a synergy between process and enterprise that boosts the return from your most important asset: your customers.

Communication objects available from HP:

ELX Communication Object	Connects to the MM, SD and FI/CO modules of SAP R/3, and gives you the option of communicating by IDOCS, ABAP or ALE. Also allows you to trigger data movement based on the execution and content of messages.
File Communication Object	Facilitates data transfer to or from any application able to write to or read from text files. Also allows you to trigger data transfer based on the content of the text files.
HP RTAP Communication Object	Connects to an HP RTAP database and facilitates writes and reads to and from that database. Also allows you to trigger data movement based on an HP RTAP event.
MS-SQL Communication Object	Connects to Microsoft SQL Server and Wonderware IndustrialSQL Server and facilitates common operations. Also allows you to trigger data transfer based on MS SQL Server and IndustrialSQL Server operations.
Oracle Communication Object	Connects to an Oracle database and facilitates operations such as SELECT, INSERT, UPDATE and DELETE. Also allows you to trigger data movement based on an Oracle operation.
SAP PM Communication Object	Connects to and carries messages to and from the PM module of SAP R/3. Also allows you to trigger data movement based on the execution and content of PM messages.
SAP PP-PI Communication Object	Connects to and carries messages to and from the PP-PI module of SAP R/3. Also allows you to trigger data movement based on the execution and content of PP-PI messages.

For a list of communication objects and services available from HP Solution Partners, visit the HP Automation Integration Software web site at www.hp.com/go/ais.

HP Enterprise Link for HP-UX and Windows NT

HP Enterprise Link is a cornerstone of the HP Automation Integration Software family of products. For more information on HP AIS and its other products, visit the HP Automation Integration Software web site at www.hp.com/go/ais.



For more information about Hewlett-Packard test & measurement products, applications, services, and for a current sales office listing, visit our web site, <http://www.hp.com/go/tmdir>. You can also contact one of the following centers and ask for a test and measurement sales representative.

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Hewlett-Packard Company
Test and Measurement Call Center
P.O. Box 4026
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Canada:

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5150 Spectrum Way
Mississauga, Ontario
L4W 5G1
(tel) 1 877 894 4414

Europe:

Hewlett-Packard Company
European Marketing Organisation
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1180 AZ Amstelveen
The Netherlands
(tel) (31 20) 547 9999

Japan:

Hewlett-Packard Japan Ltd.
Measurement Assistance Center
9-1, Takakura-Cho, Hachioji-Shi,
Tokyo 192-8510, Japan
(tel) (81) 426 56 7832
(fax) (81) 426 56 7840

Latin America:

Hewlett-Packard Company
Latin American Region Headquarters
5200 Blue Lagoon Drive
9th Floor
Miami, Florida 33126
U.S.A.
(tel) (305) 267-4245/4220
(fax) (305) 267-4288

Australia/New Zealand:

Hewlett-Packard Australia Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia
(tel) 1 800 629 485 (Australia)
(tel) 0 800 738 378 (New Zealand)
(fax) (61 3) 9210 5489

Asia Pacific:

Hewlett-Packard Asia Pacific Ltd.
17-21/F Shell Tower, Times Square,
1 Matheson Street, Causeway Bay,
Hong Kong SAR
(tel) (852) 2599 7777
(fax) (852) 2506 9285

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