Entire Net-Work

Concepts

Version 7.9.2

October 2022

ADABAS & NATURAL

Table of Contents

1 About this Documentation

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *`folder.subfolder.service`*, APIs, Java classes, methods, properties.
`Italic`	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
`Monospace font`	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Product Documentation

You can find the product documentation on our documentation website at **https://documenta-tion.softwareag.com**.

In addition, you can also access the cloud product documentation via **https://www.software-ag.cloud**. Navigate to the desired product and then, depending on your solution, go to "Developer Center", "User Center" or "Documentation".

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Tech Community

You can collaborate with Software AG experts on our Tech Community website at **https://tech-community.softwareag.com**. From here you can, for example:

- Browse through our vast knowledge base.

- Ask questions and find answers in our discussion forums.

- Get the latest Software AG news and announcements.

- Explore our communities.

- Go to our public GitHub and Docker repositories at **https://github.com/softwareag** and **https://hub.docker.com/publishers/softwareag** and discover additional Software AG resources.

Product Support

Support for Software AG products is provided to licensed customers via our Empower Portal at **https://empower.softwareag.com**. Many services on this portal require that you have an account. If you do not yet have one, you can request it at **https://empower.softwareag.com/register**. Once you have an account, you can, for example:

- Download products, updates and fixes.

- Search the Knowledge Center for technical information and tips.

- Subscribe to early warnings and critical alerts.

- Open and update support incidents.

- Add product feature requests.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

2 Concepts and Facilities

Entire Net-Work is the backbone of Software AG's distributed computing technology. It is middleware that provides a common communication service for database applications, query tools, cooperative processing applications, application development tools, and other software. Its primary function is to transmit Adabas calls from a client application to a remote Adabas database. However, it is also used by clients to access other Software AG product servers (such as those for EntireX Communicator, Tamino, or Adabas SQL Gateway).

In addition to Entire Net-Work for open system platforms (Windows and Linux), other versions of Entire Net-Work run on a range of hardware and software platforms including IBM mainframes. Using Entire Net-Work, organizations can implement applications distributed across multiple heterogeneous platforms.

Once you have installed the Entire Net-Work Client components, you must manually make updates in the Adabas Manager (AMN) if you need to support the Simple Connection Line Driver. For more information, read *Required Post-Installation Updates for Simple Connection Line Driver Support*, in the *Entire Net-Work Client Installation and Administration Guide*.

> **Note:** If you attempt to install and use Entire Net-Work in a system with a firewall in place, be sure that your system administrator has set up the firewall so that the Entire Net-Work component applications can access the ports they need (including the Adabas Directory Server port and those Entire Net-Work dynamically assigns during its own processing). For more information about Entire Net-Work ports, read *Port Number Reference*, in the *Entire Net-Work LUW Installation Guide*. For information about configuring Entire Net-Work components for Windows personal firewall, read *Configuring Product Components for Windows Personal Firewall*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.

This chapter provides an overview of Entire Net-Work 7 for open system platforms. It covers the following topics:

Architecture

Components

Understanding Partitioning

Understanding Filtering

Getting Started

3 Architecture

The primary objective of Entire Net-Work is to ship Adabas calls from a client to a database and to ship the reply back to the client, as depicted in the following diagram.
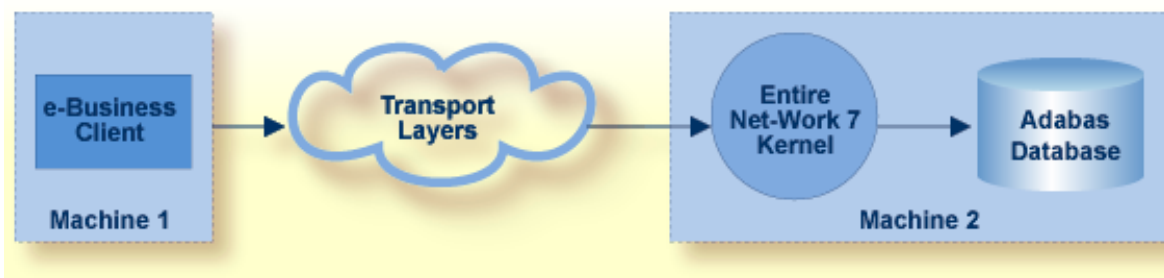
An *e-business client* is any Adabas client application that uses the Entire Net-Work 7 e-business model and its associated message protocol and Directory Server entries to access Adabas databases. Hence, all of the following applications are or can be e-business clients:

- Jadabas client applications

- Natural applications

- Tamino applications

- Adabas SQL Gateway applications

- Any 3-GL user-written application that makes the Adabas() call.

Entire Net-Work 7 provides communications between classic Entire Net-Work 2, mainframe Entire Net-Work, and e-business Entire Net-Work 7 Clients and databases. While it is designed to work with Adabas Version 7 and future versions of Adabas on open systems, it contains migration logic that allows it to work with legacy products and applications as well. Entire Net-Work operates with existing application programs transparently; users need not modify their existing client applications.

Entire Net-Work 7 also supports communications using Secure Sockets Layer (SSL). This support is provided using SSL protocol target entries in the Adabas Directory Server. For more information about target entries in the Directory Server, read *Directory Server Target Entries* in the *Concepts* chapter of the *Software AG Directory Server Installation and Administration Guide*.

In addition, Software AG has an SSL Toolkit you can use, for testing purposes, to set up a certificate authority. You can then use the certificate authority to create security certificates for test purposes only. For more information about the SSL Toolkit, read *Using the SSL Toolkit* in the *Encryption for Entire Net-Work User Guide*, available from your Software AG support representative.

> **Note:** Due to export restrictions, the SSL Toolkit is not included on the installation CD. If you plan to use SSL in your enterprise and want to use the SSL Toolkit, please contact your Software AG support representative.

The following diagram depicts the interaction of Entire Net-Work components on a variety of systems: some with classic Entire Net-Work 2 installed, some with mainframe Entire Net-Work components installed, and some with Entire Net-Work 7 Kernels or clients installed. In all cases, the URL of the database is extracted by the Entire Net-Work 7 Kernel or client from the Adabas Directory Server and the Directory Server and Entire Net-Work 7 configurations are administered using the centralized System Management Hub (SMH). The section *Components*, elsewhere in this guide, describes each of the Entire Net-Work components.
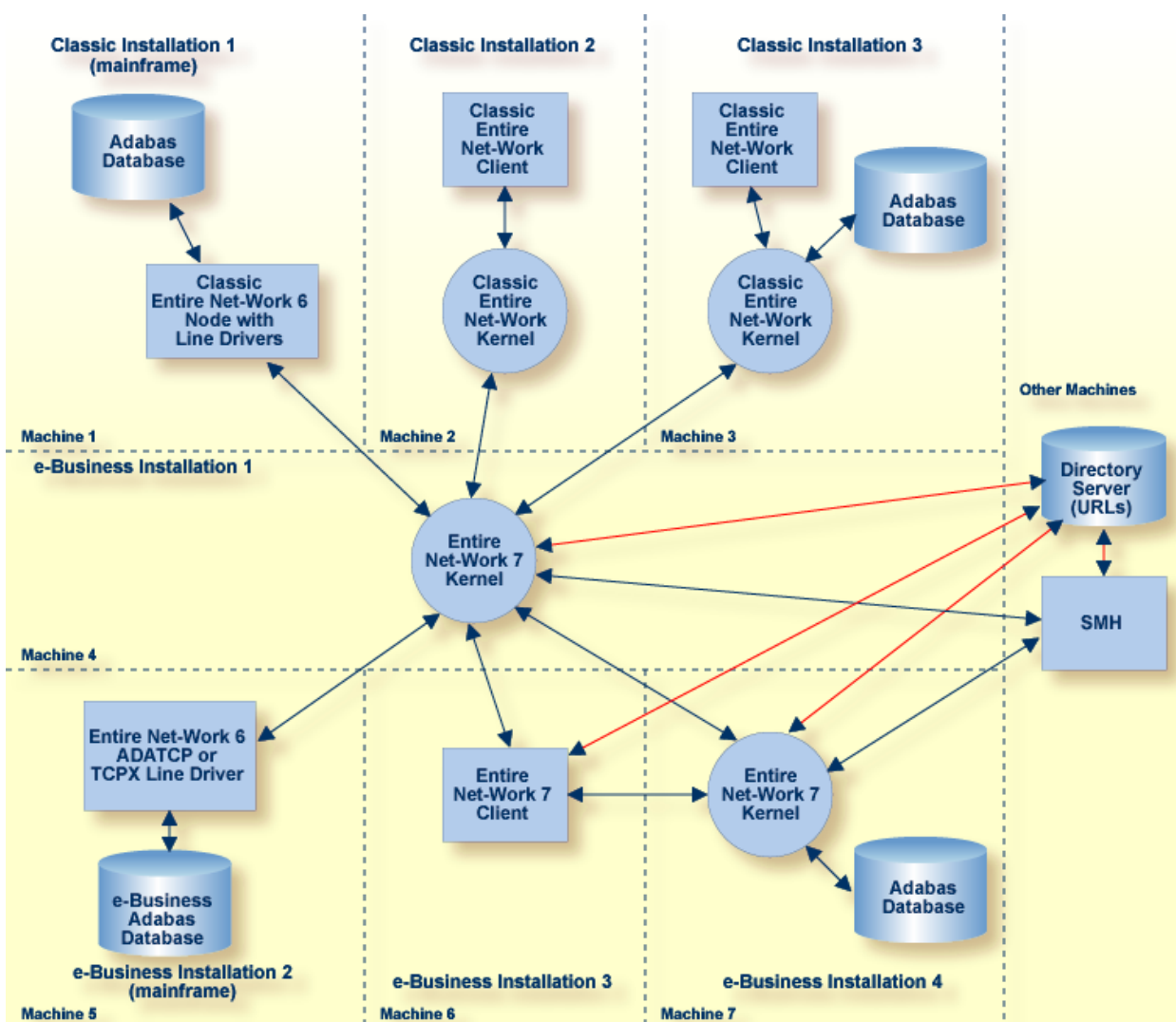
Finally, you can use partitioning and filtering in your Directory Server to direct Kernels and clients to specific databases. This allows you to use one Directory Server for your whole enterprise, rather than separate Directory Servers for different departments within your enterprise. For more information about partitioning, read *Understanding Partitioning* and *Understanding Filtering*, elsewhere in this guide.

4 Components

Entire Net-Work 7 components include: Entire Net-Work Server and Entire Net-Work Client. In addition, Entire Net-Work 7's e-business model makes use of a number of other Software AG products to achieve its goals:

- Adabas Directory Server
- Adabas Manager

Entire Net-Work Client

An Entire Net-Work Client uses the Entire Net-Work 7 e-business message protocol to access Adabas databases. A Kernel does not need to be installed on the same system as a client.

Simply install an Entire Net-Work Client on any machine from which you wish to access Adabas databases. Only one Entire Net-Work Client installation is needed on the machine. Assuming the appropriate Kernels have been defined in your enterprise and the Adabas Directory Server entries have been migrated for Entire Net-Work, your client should be immediately able to access the Adabas databases it needs.

When you install Entire Net-Work Client, its Windows service or Linux daemon is installed. Using the Adabas Manager (AMN), you can define multiple client configurations within Entire Net-Work Client. Multiple client configurations allow you to control how clients use your network. Each client configuration can have its own partition, filter, database, trace, user exit, and Directory Server settings. In other words, by directing client requests to particular client configurations, you can control which databases are accessible and what trace and user exit settings are used for the client request. For information about using partitioning and filtering, read *Understanding Partitioning* and *Understanding Filtering*, in the *Entire Net-Work LUW Concepts Manual*.

When you receive your Entire Net-Work Client package, it includes installation code for a default client configuration.

> **Note:** If you attempt to install and use Entire Net-Work Client in a system with a firewall in place, be sure that your system administrator has set up the firewall so that the Entire Net-Work Client component applications can access the ports they need (including the Adabas Directory Server port and those Entire Net-Work dynamically assigns during its own processing). For more information about Entire Net-Work ports, read *Port Number Reference*, in the *Entire Net-Work LUW Installation Guide*. For information about configuring Entire Net-Work components for Windows personal firewall, read *Configuring Product Components for Windows Personal Firewall*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.

Entire Net-Work Server

An Entire Net-Work Server uses the Entire Net-Work 7 e-business message protocol to access Adabas databases. Using Entire Net-Work Server, you can set up multiple Kernels that can be used to access Adabas databases. A server does not need to be installed on the same system as an Entire Net-Work Client.

Simply install an Entire Net-Work Server on any machine where you wish to define Kernels. Only one Entire Net-Work Server can be installed on a machine. Kernel definitions are required on every machine on which an Adabas open system database resides, if you want your Entire Net-Work Clients to be able to access the open system database.

When you install Entire Net-Work Server, its Windows service or Linux daemon is installed. Using the Adabas Manager (AMN), you can define multiple Kernels within Entire Net-Work Server. Multiple Kernels allow you to control how your network is used. Each Kernel can have its own partition, filter, database, trace, user exit, and Directory Server settings. In other words, by specifying database access definitions for particular Kernels, you can control which databases are accessible and what trace and user exit settings are used for the client requests to those databases.

For more information about Entire Net-Work Server and Kernel parameters, read *Managing Servers* and *Managing Kernels*, in the *Entire Net-Work LUW Administration Guide*. For information about using partitioning and filtering, read *Understanding Partitioning* and *Understanding Filtering*, elsewhere in this guide.

When you receive your Entire Net-Work Server package, it includes installation code forEntire Net-Work Server. This includes code necessary to define and maintain Entire Net-Work Kernels.

> **Note:** If you attempt to install and use Entire Net-Work Server in a system with a firewall in place, be sure that your system administrator has set up the firewall so that the Entire Net-Work Server component applications can access the ports they need (including the Adabas Directory Server port and those Entire Net-Work dynamically assigns during its own processing). For more information about Entire Net-Work ports, read *Port Number Reference*, in the *Entire Net-Work LUW Installation Guide*, in the *Entire Net-Work LUW Install-ation Guide*, elsewhere in this guide. For information about configuring Entire Net-Work components for Windows personal firewall, read , elsewhere in this guide*Configuring Product Components for Windows Personal Firewall*, in the *Entire Net-Work Server LUW Installation and Administration Guide*, elsewhere in this guide.

The Kernel

The Entire Net-Work 7 Kernel provides access to local and e-business Adabas databases. It requires a set of standard URLs (maintained using the Directory Server) to control its activities. A Kernel must be installed on each machine on which a database resides if you want Entire Net-Work clients to reach it.

In addition, if your Entire Net-Work Clients need to communicate with databases on the mainframe or with databases managed by a classic Entire Net-Work 2 Kernel, a single Entire Net-Work 7 Kernel must be used as a bridge to provide this access. In this case, the Kernel used can be one already defined on a system with a local database. It can also be a Kernel that is defined standalone on a machine without a local database. You will need to evaluate your network traffic to determine which configuration works best for your site.

The Entire Net-Work 7 Kernel is the most complex component in the product because it provides various migration bridge technologies to assist you.

1. A Kernel provides access to local Adabas databases. It manages Directory Server URLs so that all e-business clients can use the new e-business message protocol to access the database via the Kernel. In addition, it broadcasts local database availability to all connected classic nodes so that clients on those nodes can also access the database via the older protocol.
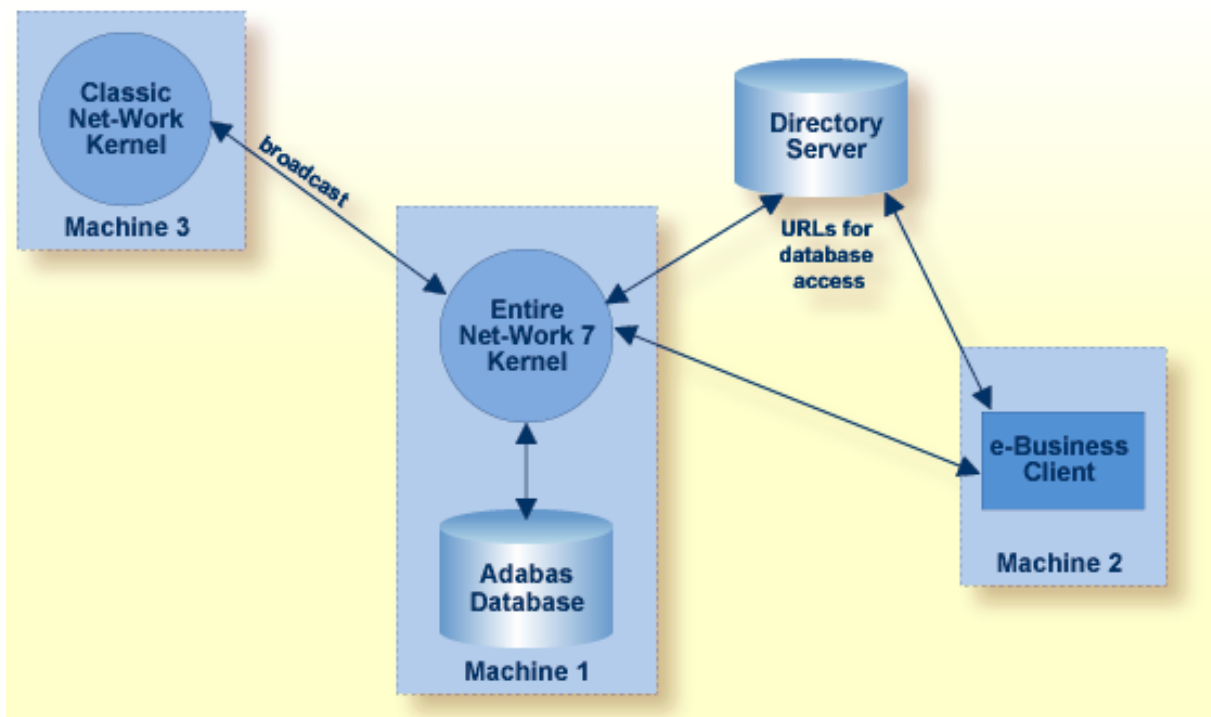
The Kernel finds local databases by examining the *ADABAS.INI* file on the local system, which is maintained by the Adabas DBA Workbench. If you use Adabas command line tools to define your databases, instead of the DBA Workbench, the database definitions are not added to *ADABAS.INI* and must be added manually if you want the Entire Net-Work Kernel to provide access to all of your local databases. Software AG does not recommend that you mix the usage of the DBA Workbench and command line tools to define your databases. In this case, only the databases listed in *ADABAS.INI* will be processed.

If no *ADABAS.INI* file is found or if it exists but contains no DBID entries (under DB_LIST), the Entire Net-Work Kernel will poll the local system for all 255 potential database IDs and register those it finds.

2. A Kernel provides access from e-business clients to databases on connected classic nodes using the older Entire Net-Work protocols. When a classic node connects or is connected to, the Kernel detects available remote databases and manages Directory Server URLs accordingly. Consequently, e-business clients can send Adabas calls to the Kernel where they will be converted to the older Entire Net-Work protocol and relayed to the classic node. Each reply is reconverted to the newer, e-business protocol and returned to the client. The Kernel also keeps track of database transitions (starts, stops, crashes), connections, and disconnections for databases on connected classic nodes.
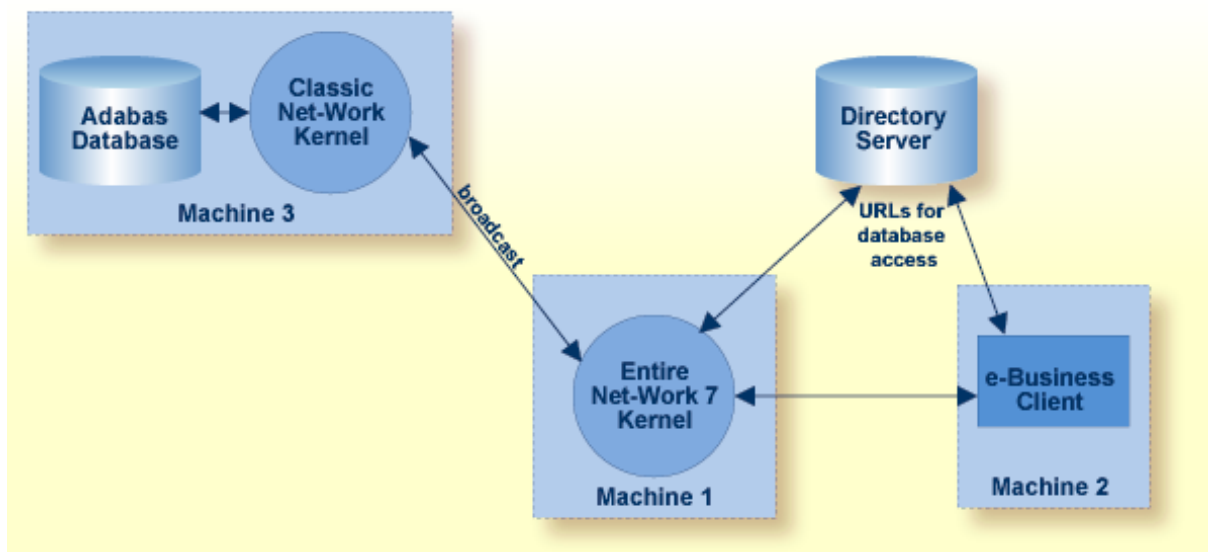
3. A Kernel provides access from classic Entire Net-Work to *e-business Adabas databases*. When an e-business database is connected to a Kernel, the database availability is broadcast to all connected classic nodes using the older Entire Net-Work protocol. Classic Entire Net-Work can then send Adabas calls to the Kernel where they will be converted into the e-business protocol and sent to the database. Replies are reconverted to the classic message protocol and relayed back to the client.

> 📄 **Note:** Currently mainframe e-business Adabas database access is only supported if Entire Net-Work 6 (or later) ADATCP or Simple Connection Line Driver (TCPX line driver) are installed on the mainframe host.
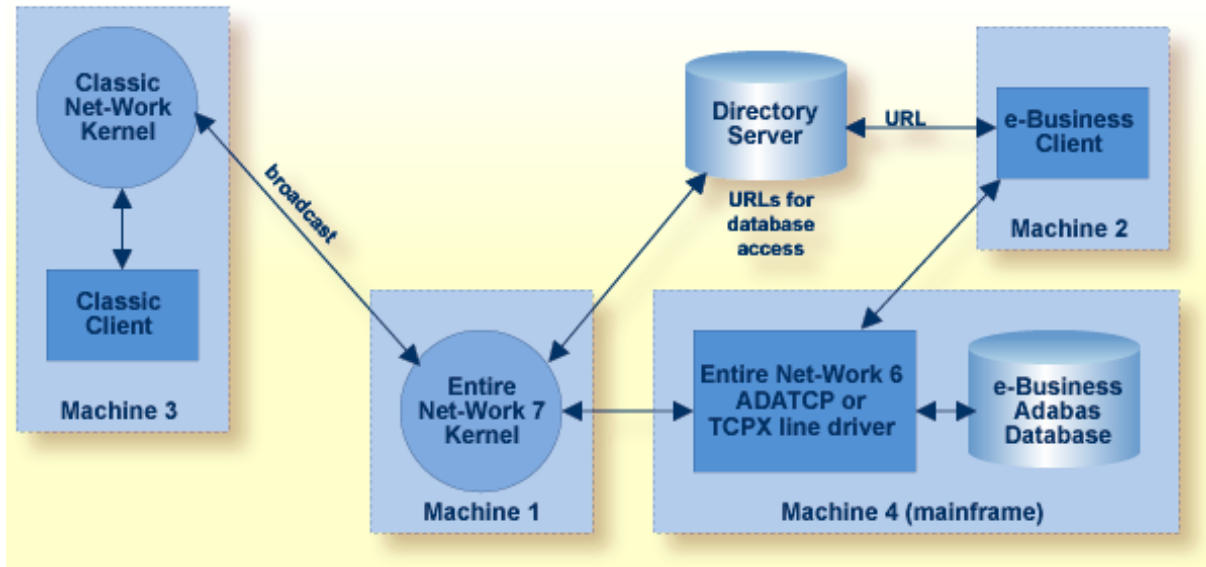
In summary, once all classic connection definitions have been converted, the Entire Net-Work 7 Kernel, using the Directory Server entries, becomes the bridge between classic Entire Net-Work installations and new e-business Entire Net-Work 7 installations.

You can set up partitioning of Kernel entries to direct Kernel requests to specific databases. This partition information can be specified during installation or later using the Adabas Manager (AMN). Partition information is stored in the Directory Server. For more information, read *Understanding Partitioning*, elsewhere in this guide.

Directory Server

Entire Net-Work uses information stored in a Directory Server to send and receive messages from the client to the database and back. The Directory Server contains an entry for each Kernel and database in the network.

> 🛑 **Caution:** The Directory Server is critical to the functions of Entire Net-Work 7. It should be on a dedicated system that is operational 24 hours a day, with a UPS. The location of the Directory Server must be specified to the Kernel and clients when they are installed. In addition, the location of the default Directory Server may be defined in the SAGXTSDSHOST entry in the DNS. You may need to consult with your Information Technology department to make updates to the DNS. If no Directory Server can be found for your enterprise, Entire Net-Work cannot function.

All Directory Server data is stored in the form of a Universal Resource Locator (URL) that is familiar to any Internet user. The Directory Server allows complex URLs to contain management data for Entire Net-Work using this standard industry-wide syntax. More importantly, an Entire Net-Work Kernel can dynamically add, modify, or delete client access URLs in the Directory Server.

Entire Net-Work 7 also supports communications using Secure Sockets Layer (SSL) target entries in the Adabas Directory Server. For more information about target entries in the Directory Server, read *Directory Server Target Entries* in the *Concepts* chapter of the *Software AG Directory Server Installation and Administration Guide*. In addition, an SSL Toolkit is provided that allows you to set up a certificate authority that you can use to create security certificates for test purposes only. For more information about the SSL Toolkit, read *Using the SSL Toolkit* in the *Encryption for Entire Net-Work User Guide*, available from your Software AG support representative.

An Entire Net-Work Client only needs to be able to extract the location of the Adabas database it is trying to access from the Directory Server. Consequently, a single Directory Server URL is required for each database in the enterprise in order for all e-business clients to access that database. If Entire Net-Work partitioning is used, more than one Directory Server entry may exist for a given database. For more information, read *Understanding Partitioning*, in the *Entire Net-Work LUW Concepts Manual*.

When operational changes occur for a database (startups, shutdowns, and movement between machines), the Entire Net-Work Kernel automatically maintains the URLs in the Directory Server: it adds a URL to the Directory Server when it discovers a database (and can accept Adabas calls intended for that database); likewise it can remove the same URL when a database becomes unavailable.

At least one Adabas Directory Server should be installed in your enterprise; we recommend that you install only one Directory Server to ensure centralized administration. However, your enterprise network configuration may require more than one. For example, you may want to install more than one Directory Server to fully direct requests to specific databases. While partitioning can also be used to restrict database access, all entries (in all partitions) of a Directory Server can be maintained via the Adabas Manager, so restriction is not complete. If, however, you use multiple Adabas Managers, you can limit what entries are available for viewing in the Directory Server portion of the Adabas Manager.

Directory Server administration is performed using the Adabas Manager. The Directory Server administration function allows you to populate this directory with entries that identify the address of each target in your network.

> **Note:** If you attempt to install Entire Net-Work in a system with a firewall in place, be sure that your system administrator has opened the firewall for the Adabas Directory Server port or the installation may not complete successfully.

The port number used by the Directory Server can be changed, but must be changed with care. For complete information on changing the Directory Server port used by Entire Net-Work 7

components, read *Changing the Adabas Directory Server Port Number*, in the *Entire Net-Work LUW Installation Guide*.

Adabas Manager

Adabas Manager performs Entire Net-Work, Entire Net-Work Client, and Adabas Directory Server management tasks.

Adabas Manager (AMN), provides centralized management of all Software AG products installed in the enterprise, using a Web-based graphical user interface. Use of Adabas Manager eliminates the need for a system administrator to visit individual machines or maintain multiple product windows on the desktop.

Adabas Manager can be used to manipulate configuration information. Using Adabas Manager, you can easily change the URLs stored in the Directory Server without fully understanding the syntax. In addition, the Entire Net-Work Servers and Entire Net-Work Clients can be examined and controlled via Adabas Manager. The status of classic nodes and databases for which connections have been defined can be determined. Statistics can be examined and various control functions, such as node disconnection, Kernel shutdown, and trace settings can be performed.

⊗ **Caution:** Adabas Manager should be on a dedicated system that is operational 24 hours a day. If Adabas Manager is not available, you cannot maintain and control Entire Net-Work, Entire Net-Work Client, or Adabas Directory Server.

If Adabas Manager is already installed in your enterprise, it should not be installed again. Only one Adabas Manager is required to manage all Software AG products that require it.

For more information about the management tasks that can be performed using Adabas Manager, refer to *Using Adabas Manager*.

SSL Support

Entire Net-Work 7 also supports communications using Secure Sockets Layer (SSL). This support is provided using SSL protocol target entries in the Adabas Directory Server. For more information about target entries in the Directory Server, read *Directory Server Target Entries* in the *Concepts* chapter of the *Software AG Directory Server Installation and Administration Guide*.

In addition, Software AG has an SSL Toolkit you can use, for testing purposes, to set up a certificate authority. You can then use the certificate authority to create security certificates for test purposes only. For more information about the SSL Toolkit, read *Using the SSL Toolkit* in the *Encryption for Entire Net-Work User Guide*, available from your Software AG support representative.

Note: Due to export restrictions, the SSL Toolkit is not included on the installation CD. If you plan to use SSL in your enterprise and want to use the SSL Toolkit, please contact your Software AG support representative.

5 Understanding Partitioning

Entire Net-Work supports partitioning of Adabas Directory Server entries. Partitioning enhances your ability to use one Directory Server for your whole enterprise, rather than separate Directory Servers for different departments within your enterprise. The partitions need to be managed separately, but only one Directory Server needs to be installed.

Once you have defined an Entire Net-Work Client or Entire Net-Work Kernel, you can assign it to a specific partition. If you specify one for an Entire Net-Work Kernel, the Directory Server entries created for that Kernel are stored in a partition by that name in the Directory Server configuration or in the Entire Net-Work Kernel configuration file (depending on where the partition is defined); the entries in the partition are maintained separately from the other entries in the appropriate configuration. The Kernel is only able to direct requests to databases, classic Entire Net-Work nodes, and other Kernels that have entries in this partition. Likewise, when you specify a partition name for an Entire Net-Work Client, the client can only direct requests to databases for which there are Directory Server entries in the specified partition.

Here are some of the advantages of partitioning:

- You can use partitioning to direct Entire Net-Work Clients and Kernels to specific databases.

- If you have created Adabas databases with identical database IDs, you can use partitioning to correctly identify which client calls get directed to which Adabas database.

- You can use partitioning to group client calls to an Adabas database, thus reducing the number of actual connections required for that database. This can be especially useful if you are using an Entire Net-Work mainframe product to access a specific Adabas database. It also provides you with some level of client control: if you want to remove access to a specific database for clients in a given partition, simply remove the access URL entry for that database (using the Adabas Manager) or stop the Kernel in that partition.

- Using SSL, you can use impose real security requirements on calls made by clients in specific partitions.

For complete information about partitioning, including an example, read *Partitioning a Directory Server* in the *Software AG Directory Server Installation and Administration Guide*.

6   **Understanding Filtering**

Entire Net-Work supports filtering of Entire Net-Work Client configurations and Entire Net-Work Kernel definitions by Adabas database ID. In this way, individual Entire Net-Work Client configuration definitions and Entire Net-Work Kernel definitions can apply to only specific databases.

Filtering is set up in the Adabas Manager for both client configurations and for Kernels.

Filtering in Client Configurations

For Entire Net-Work Client configurations, database filtering is specified on the **Client Parameters** panel and allows you to identify databases that can be accessed by the client. If no databases are listed in the **ACCEPTED_DBIDS** field, all databases defined in the Adabas Directory Server can be accessed except those listed in the **REJECTED_DBIDS** field. Likewise, if no databases are listed in the **REJECTED_DBIDS** field, all databases in the Directory Server can be accessed, unless a specific list is provided in the **ACCEPTED_DBIDS** field.

For more information on setting these Entire Net-Work Client configuration parameters, read *Maintaining Client Configuration Parameters*, in the *Entire Net-Work LUW Administration Guide*.

Filtering in Kernel Definitions

You can filter Kernels by requests:

- made to specific Adabas database IDs;
- relayed to other Kernels;
- submitted from other Kernels, by Kernel name;
- submitted to and from specific machines, by machine name; and
- submitted from other clients, by client name

This section covers the following topics:

- Filtering Requests to Adabas Databases
- Filtering Relay Requests to Other Kernels
- Filtering Requests from Other Kernels
- Filtering Requests to and from Specific Machines

- Filtering Requests to and from Specific Clients

Filtering Requests to Adabas Databases

For Entire Net-Work Kernel definitions, database filtering is specified on the **Kernel Filters** panel and allows you to identify databases for which service requests should be processed by the Kernel. If no databases are listed in the **ACCEPTED_DBIDS** field, the Kernel will process all requests to all databases defined in the Adabas Directory Server, except those listed in the **REJECTED_DBIDS** field. Likewise, if no databases are listed in the **REJECTED_DBIDS** field, the Kernel will process all requests to all databases defined in the Adabas Directory Server, unless a specific list is provided in the **ACCEPTED_DBIDS** field.

For more information on setting these Kernel parameters, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

Filtering Relay Requests to Other Kernels

In the basic Kernel parameters, you can use the **RELAY_TRAFFIC** parameter to restrict whether or not requests *to* other Kernels in the network should be relayed by the Kernel. If the value of the **RELAY_TRAFFIC** field is "YES", requests are relayed to other Kernels; if the value is "NO", they are not.

For more information on setting these Kernel parameters, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

Filtering Requests from Other Kernels

A combination of Kernel parameters can be used to filter requests to the Kernel:

■ In the advanced Kernel parameters, you can use the **UNSOLICITED** parameter to indicate whether or not the Kernel will process service requests *from* other Kernels it has not included in its Kernel filter list. If "YES" is specified, Kernel filtering is ignored and any Kernel can submit service requests to the Kernel. If "NO" is specified, only Kernels included on the Kernel filter list can submit requests to the Kernel; all other unsolicited requests are ignored. The Kernel filter list parameters are governed by the **ACCEPTED_KERNELS** and **REJECTED_KERNELS** parameters.

If the **UNSOLICITED** advanced Kernel parameter is set to "YES", any Kernel can submit service requests to this Kernel, except Kernels listed in the **REJECTED_KERNELS** filter parameter on the Kernel filter list. If the **UNSOLICITED** advanced Kernel parameter is set to "NO", all unsolicited Kernel service requests are ignored, except for the Kernels listed in the **ACCEPTED_KERNELS** filter parameter on the Kernel filter list.

For more information on setting the **UNSOLICITED** parameter, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

- You can create a Kernel filter list to identify the Kernels from which service requests to the Kernel will be processed. The Kernel filter list is specified using the **ACCEPTED_KERNELS** and **REJECTED_KERNELS** parameters. Using these parameters, you can list Kernel names that should be accepted (service requests from these Kernels will be processed) or rejected (services requests from these Kernels will be rejected).

  For complete information on the Kernel filter list and maintaining its parameters, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

Filtering Requests to and from Specific Machines

You can create a host machine filter list to identify the host machines from which service requests to the Kernel will be processed and to which the Kernel can send service requests. The host machine filter list is specified using the **ACCEPTED_HOSTS** and **REJECTED_HOSTS** parameters. Using these parameters, you can list machines names that should be accepted (service requests from and to these machines will be processed) or rejected (services requests from and to these machines will be rejected).

For complete information on the host machine filter list and maintaining its parameters, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

Filtering Requests to and from Specific Clients

You can create a client filter list to identify the Entire Net-Work Clients from which service requests to the Kernel will be processed. The client filter list is specified using the **ACCEPTED_CLIENTS** and **REJECTED_CLIENTS** parameters. Using these parameters, you can list Entire Net-Work Client names that should be accepted (service requests from these clients will be processed) or rejected (services requests from these clients will be rejected).

For complete information on the client filter list and maintaining its parameters, read *Maintaining Kernel Filters*, in the *Entire Net-Work LUW Administration Guide*.

7 Getting Started

 To get started using Entire Net-Work:

1   Be sure you have read the following documentation, as appropriate for your installation.

   ■ If you need to know what's new and changed in this release of Entire Net-Work, read *Release Information* in the *Entire Net-Work Release Notes*.

   ■ If you intend to migrate from Entire Net-Work 2 to Entire Net-Work 7 on your open system platforms, we recommend that you read *Planning for Entire Net-Work 7* in the *Entire Net-Work LUW 7 Planning Guide* for a complete description of the differences between these Entire Net-Work releases and the steps you should take to perform the migration.

   ■ If you need information on the Directory Server, read the *Software AG Directory Server Installation and Administration Guide*.

   ■ If you need assistance with setting up SSL support for Entire Net-Work, consider using the SSL Toolkit for testing purposes, available from Software AG. For more information, read *Using the SSL Toolkit* in the *Encryption for Entire Net-Work User Guide*, available from your Software AG support representative.

   > **Note:** Due to export restrictions, the SSL Toolkit is not included on the installation CD. If you plan to use SSL in your enterprise and want to use the SSL Toolkit, please contact your Software AG support representative.

2   Install the necessary Entire Net-Work components:

   ■ If necessary, install the Adabas Manager (AMN) and the Adabas Directory Server. For information on when and where to install these products, read the *Software AG Directory Server Installation and Administration Guide* and the *Adabas Manager* documentation.

   ■ Install the Entire Net-Work Servers and Entire Net-Work Clients where they are needed. Each Entire Net-Work Server installation requires a license key. For information on when

and where to install these components, read *Configuration Considerations* in the *Entire Net-Work LUW Installation Guide*.

3   Start the Entire Net-Work Servers and Entire Net-Work Clients you installed in the previous step.

When you install Entire Net-Work Servers, they are automatically started by the installation and each time the machine is restarted. For more information, read *Starting and Stopping Entire Net-Work Server*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.

When you install Entire Net-Work Clients, they must be manually started. For more information, read *Starting and Stopping Entire Net-Work Client*, in the *Entire Net-Work Client Installation and Administration Guide*.

4   Using the Adabas Manager (AMN), define appropriate Kernels for your installation:

■ One Kernel should be defined for each machine on which an Adabas database is installed. However, you can define multiple Kernels for a machine and use partitioning and filtering to specify how each is used. For more information, read

■ One Entire Net-Work Kernel must be used as a bridge to access databases on the mainframe or databases managed by classic Entire Net-Work 2 Kernels. This Kernel will translate and direct requests as appropriate.

If partitioning and filtering are necessary, set up partitions and filters for the Kernels.

For information on managing Kernel definitions, read *Managing Kernels*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.

5   If necessary, use Adabas Manager to add appropriate client configurations for your installation.

6   Add classic connection definitions to any of the managed nodes or Kernels you have defined. A classic connection is a connection with an Entire Net-Work 2 for open systems node, an Entire Net-Work 3 for OpenVMS node or with an Entire Net-Work 6 (mainframe) node that does not have the Simple Connection Line Driver installed.

If you have problems adding a classic connection to a managed node, verify that the Kernel associated with that node is started.

For information on adding connections (classic or other) in Kernel definitions, read *Maintaining Connection Definitions*, in the *Entire Net-Work Server LUW Installation and Administration Guide*.

7   Stop and restart the Kernels to which you have added classic connection definitions or whose other parameters you have modified.

For information on starting and stopping Kernels, read *Starting a Kernel* and *Shutting Down a Kernel* in the *Entire Net-Work Server LUW Installation and Administration Guide*.

After completing these steps, your Entire Net-Work installation should be functional.

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