Setup Checklist – Gentran Integration Suite Implementation

This document contains information to assist you when planning your Gentran Integration Suite implementation.

Key Terms

The following terms and definitions will assist you in understanding the concepts that are discussed in this document:

✦ Cluster – Two or more connected copies of Gentran Integration Suite that share a database.

✦ Node – One copy of Gentran Integration Suite in a cluster.

✦ Federated system – You can set up two or more Gentran Integration Suite systems as peers in a federated system to enhance your trading partner relationships. A federated system is a network of Gentran Integration Suite installations (nodes) that can communicate with each other through discovery points. A discovery point is a specific URL on each Gentran Integration Suite node that enables other nodes to link to it.

A federated system is different from a clustered system in that each copy of Gentran Integration Suite has its own database and can be at any location. In clustering, all copies of Gentran Integration Suite use the same database and servers are typically in one location. A Gentran Integration Suite cluster is one node in a federated system.

✦ Perimeter Server – Communications management software that can be installed in a DMZ and manages communication flows between a perimeter network and Gentran Integration Suite TCP-based transport adapters.

✦ Perimeter Services – Gentran Integration Suite subsystem supporting multihoming and secure perimeter network traversing for Gentran Integration Suite B2B communications protocols.

Checklist for Implementation

The following table includes the stages of the implementation process. Each task is also a link to more detailed information about that stage. You may want to make a copy of this checklist and use it to record any notes you may have:

Stage	Task	Your Notes
1	*Install Gentran Integration Suite* on page 10.	
2	*Tune Gentran Integration Suite* on page 10.	
3	*Configure Permissions and Create User Accounts* on page 10.	
4	*Configure Services and Adapters* on page 11.	

Stage	Task	Your Notes
5	*Create or Migrate Maps* on page 11.	
6	*Create Business Process Models* on page 12.	
7	*Schedule the Business Process Models* on page 12.	
8	*Associate Communications Adapters with Business Processes* on page 12.	
9	*Create Trading Partner Profiles* on page 12.	
10	*Test Business Processes* on page 13.	
11	*Schedule Archiving and Purging* on page 13.	

Implementation Process

The topics in this section describe the implementation stages for Gentran Integration Suite. The topics are presented in logical order and follow the order of the previous checklist table.

The stage descriptions do not indicate the role of the user performing the tasks in each stage, but assume the appropriate user is doing each step in the process. The user may be a system administrator or any other user having responsibility for the described tasks.

Create Architectural Design Plan

Your architectural design plan details the ways you will use Gentran Integration Suite and the components and features you will employ in the process. This stage is perhaps the most intensive part of your overall implementation of Gentran Integration Suite. The more accurate and detailed your plans are, the more efficiently your implementation will progress.

Your plan centers on determining what the processes are that your business needs to automate and integrate, and those processes will include high-level considerations such as plans to:

✦ Create peer-to-peer federated systems

✦ Set up clusters or use multiple nodes of Gentran Integration Suite

✦ Do internodal document tracking

✦ Create trading partner communities

✦ Use the Perimeter service and other components in the DMZ

The planning process becomes complex as you study it from a software perspective and consider how you will achieve the objectives.

For each process, Sterling Commerce professionals can help you to define the business process model you will create in Gentran Integration Suite, including the services, adapters, components and technologies you need, the systems that Gentran Integration Suite will interact with, and exactly what has to happen to the data at each step in a process. All of these determinations affect your required system size.

Determine System and Hardware Requirements

Before installing Gentran Integration Suite, you must ensure that your operating system and hardware meet published Gentran Integration Suite requirements and the requirements specific to your customized Gentran Integration Suite implementation.

To approximate your system requirements, you will determine the processes, components, and transaction volume required for your implementation. Sterling Commerce personnel are available to assist you in this effort.

For minimum requirements, see *Gentran Integration Suite System Requirements*. For the latest information, you can always contact Customer Support.

Size Requirements

System size is the volume of activity your system can support. The size is computed by measures such as processing speed, RAM (random access memory), CPUs (central processing units) and free disk space.

When you plan your implementation, remember that the published minimum size requirements support the Gentran Integration Suite application, but may not allow for any increased capability required by the particulars of your implementation, such as the number of transactions processed and the amount of data transferred.

Your implementation may include one or more test environments in addition to the production environment. Running a test environment is recommended, and Gentran Integration Suite enables you to bundle the work from the test environment and migrate it to the production environment when you are ready.

Obtain Product Training

Sterling Commerce consultants may install Gentran Integration Suite for you, along with a Jump Start Package for your convenience. The Jump Start package provides a preconfigured simple inbound and outbound flow, including trading profiles, enveloping activities, simple mapping for a purchase order and invoice, and so forth.

The Jump Start package is designed to let you see Gentran Integration Suite in action and experiment with how it works—a first step in training. If you like, you can use the business process models and preconfigured data from the Jump Start Package as a starting point for your own implementation by modifying them according to your own requirements.

After you have familiarized yourself with the Gentran Integration Suite interface, you may decide to attend formal Gentran Integration Suite training. Formal training provides detailed instruction for configuring and interacting with Gentran Integration Suite. Training is provided in classrooms at select Sterling Commerce locations, but may also be available on site at your company. Contact your Sterling Commerce sales representative for details.

Install Gentran Integration Suite

Sterling Commerce Consulting Services may install Gentran Integration Suite for you, or your system administrator may install it.

DMZ Considerations

You can install Gentran Integration Suite so that different components are installed on different machines.

The processing engine (Integration Broker) must be installed in your most secure LAN (local-area network) in order to efficiently process your mission critical data.

However, you can install some components in your DMZ (a computer or small subnetwork that operates between a trusted internal network, such as a corporate private LAN, and an untrusted external network, such as the public Internet). Typically, a DMZ contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers, as well as a perimeter server for security.

Gentran Integration Suite components typically installed in the DMZ are communications adapters that act as HTTP servlets interfacing with the Integration Broker inside your LAN. Communication channels are opened only from the secure LAN to the DMZ, and all data traveling through the DMZ is encrypted.

Any or all Gentran Integration Suite components may also reside on the same computer, if your network does not have a DMZ.

Tune Gentran Integration Suite

Performance tuning enables you to configure Gentran Integration Suite for the most efficient performance according to your specific needs. After installation you must tune Gentran Integration Suite—change the database settings, memory allocations, and other settings—so that Gentran Integration Suite performs as you want it to. You may allocate more or less system memory to specific components, more or less database pools, or more or less cache to specific components of Gentran Integration Suite.

A wizard-type interface guides you through the Performance Tuning selections. The system suggests property settings based on your operating system; you can let the Gentran Integration Suite automatically make these settings or you can manually enter other settings.

Any time you add volume or hardware to your system, review your performance tuning settings.

Configure Permissions and Create User Accounts

Role-based security enables you to assign permissions to users or groups of users based on the tasks they must use Gentran Integration Suite to complete. Carefully consider the users who will access the system, and create the appropriate user groups with the related permissions for those users, and then create the user accounts so that the users may access Gentran Integration Suite.

Menu options for system components to which users do not have permission do not display for those users in the interface.

Configure Services and Adapters

When you created your architectural design plan, you planned the structure for each of your business process models, and noted the services required to execute each process. Configuring services and adapters makes them available in the Graphical Process Modeler so that you can include them in your business process models.

You configure your services (including adapters) in the Gentran Integration Suite interface, where a setup wizard lets you select the desired service and guides you through the settings. The settings dictate the specifics of the activities to be performed by the services, such as files in which to place extracted data, required IP addresses or ports, time-out values, and so forth.

If you need to develop custom services for any of your business process models, use the Service SDK.

Create or Migrate Maps

Data maps specify mapping instructions for the proper transformation of data. To use the instructions in a map, you must compile the map. A compiled map is a translation object, which provides instructions for translating one format to another in a way that can be interpreted by the translator.

When creating your business process models, you associate translation services with the appropriate translation objects you have created for that step in the process.

Use the Map Editor to create any translation objects you need to include in your processes and check them in to Gentran Integration Suite.

Check Maps In and Out of Gentran Integration Suite

Gentran Integration Suite treats process models, maps, and Web templates (created using Web Extensions) as business documents for which it has a version control system. To use these documents, you must check them into and out of the system. When a document is checked out, the system locks it so that other users can not modify it at the same time. When you check in a document, Gentran Integration Suite stamps it with a version identifier. You may use a previous version for editing, activating or replacing more recent versions at any time.

Map Migration

The Gentran Integration Suite Map Conversion utilities enable you to quickly and easily convert maps created using other Sterling Commerce products to Gentran Integration Suite maps. The map conversion functionality enables you to import maps into the Map Editor from the original Gentran:Server for UNIX, Gentran:Server for iSeries, and Gentran:Basic zSeries map files.

For Gentran:Server for iSeries and Gentran:Basic zSeries maps, the map links, standard rules, extended rules, conditional relationships, and user exits are not converted by the functionality. You must add these items in to the converted map.

For Gentran:Server for UNIX maps, the simple links (unless you specify that they should be converted), standard rules, extended rules, conditional relationships, and user exits are not converted by the functionality. You must add these items in to the converted map.

Create Business Process Models

Your architectural design plan includes details describing the business process models you must create to instruct Gentran Integration Suite regarding the specifics of your processes. The business process models configure the processing required to complete business activities facilitated by Gentran Integration Suite. To create your business process models, use the Graphical Process Modeler (GPM). After creating the business process models, check them in to Gentran Integration Suite through the interface.

You may modify predefined business process models (including any sample business process models) instead of creating your models completely independently.

For detailed instructions on creating and managing business process models, see *Managing Business Processes*.

Schedule the Business Process Models

You must create schedules for any business process models that you want Gentran Integration Suite to initiate at specific intervals, dates or times. Using the scheduling tools in the Gentran Integration Suite, you can configure periodic intervals or a regular time of the day or week for a business process to run, as well as schedule a business process to run at system startup.

Wizard technology enables you to select the business process model you want to schedule and leads you through the steps.

Associate Communications Adapters with Business Processes

After your business process models are created and checked in, you must associate any communications adapters that will accept unsolicited communication (these are known as bootstrap adapters) with the business process models they will invoke. These adapters have a field in their configuration parameters to select the business process.

Create Trading Partner Profiles

Trading profiles are collections of records that describe the technology and business capabilities of your business partners to engage in e-business with each other. Gentran Integration Suite uses the trading profile data to link your trading partners with the business process models you create to handle that partner's documents.

While you can create trading partner profiles at any time, they are commonly created after you have defined a business process or translation map. Trading profiles referenced in EDI transactions require envelope information you will know after creating the map.

Within the Gentran Integration Suite interface, you can access Basic and Advanced options for creating your trading profiles. The process involves multiple steps as you enter information related to identification, document transport and exchange, delivery channel, packaging, and more. Security information unique to the partner is also stored here, such as digital certificate identification.

For detailed information and instructions, see *Working with Trading Partners and Communities*.

Test Business Processes

As a test, run the business processes you have created. You can start them manually or schedule a run time and test that the scheduled start works in conjunction with the rest of a process.

Monitor the processes to ensure that they run properly, and make any modifications as needed. For instructions, see *Monitoring and Troubleshooting*.

Schedule Archiving and Purging

In the same manner that you schedule business processes you have created, you can schedule the intervals at which you want Gentran Integration Suite to archive and purge the contents of the database. Predefined Gentran Integration Suite business processes manage these activities.

For details and instructions about configuring the archive and purge activities for your implementation of Gentran Integration Suite, see *Archiving and Purging Activities*.