

Adeptia Suite 5.2

Getting Started Guide

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Adeptia Inc.
443 North Clark Ave,
Suite 350
Chicago, IL 60654, USA

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Document Conventions

Convention	Description
Text Matter in font Verdana and font size 9 point.	Explains the installation guide.
Text matter	Click on link to reach target.
	Note:

Abbreviations Used

Abbreviation	Description
JRE	Java Runtime Environment
SOA	Service Oriented Architecture

Contact Information

In case of any queries, please contact us at:

Contact For	Email ID
Sales	sales@adeptia.com
Support	support@adeptia.com

For latest updates and information, please visit us at www.adeptia.com .

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1 ABOUT THIS GUIDE

This document is intended as a reference for those working with Adeptia Suite for the first time. For first time users, it is recommended that you step through the material in a sequential fashion.

Pre-Requisite

It is assumed at this point that you have downloaded Adeptia Suite and installed it on your machine.



To know how to install Adeptia Suite, refer to the **Installation Guide**.

This document is divided into the following sections:

- Introduction
 - [Introducing Adeptia Suite](#)
 - [Target Audience](#)
- Overview
 - [Overview of Adeptia Suite](#)
 - [Architecture of Adeptia Suite](#)
 - [Key Terms used in Adeptia Suite](#)
 - [User Types Defined in Adeptia Suite](#)
 - [Structure of Adeptia Suite](#)
 - [Top-Down Vs Bottom-Up Approach](#)
- Login Details
 - [Pre-Requisites of Using Adeptia Suite](#)
 - [Starting Adeptia Server Kernel and WebRunner](#)
 - [Login into Adeptia Suite](#)
 - [Change Password](#)
- Understanding Adeptia Suite
 - [Understanding Adeptia Suite Homepage](#)
- Functioning of Adeptia Suite
 - [Understanding the Functioning of Adeptia Suite](#)
 - [Built-in Eval Process Flows](#)

2 TARGET AUDIENCE

This document is intended for all users of Adeptia Suite, but primarily guides first-time users who are still unfamiliar with the Adeptia environment.

INTRODUCTION

3 INTRODUCING ADEPTIA SUITE

Adeptia Suite is a Web-based enterprise software product to manage, automate and optimize business processes. It allows you to document and manage processes to make them consistent, repetitive, and visible. The Adeptia Suite enables integration of disparate systems to manage enterprise-wide crucial information and automate information exchange. Its reporting capabilities provide transparent view of performance of business processes and resources, thus enabling their optimization.

Adeptia Suite comprises of four different products that are designed to meet different business requirements. These products are outlined as:

- [BPM Suite](#)
- [Integration Suite](#)
- [B2B Integration Suite](#)
- [ETL Suite](#)

BPM SUITE

BPM Suite is an enterprise software product that is designed to *Manage, Automate* and *Optimize* business processes. It combines process management with business-to-business integration. BPM Suite easily and quickly automates business processes using industry-specific standards. It allows customers to integrate disparate information sources, software applications and business users both within an enterprise and across customers, vendors and business partners. It helps business users and IT personnel to collaborate so as to automate and optimize complex business processes. It offers a powerful business tool for managers to document, control and monitor critical processes and then improve them.

INTEGRATION SUITE

Integration Suite is an enterprise software product that is designed to integrate *ANY APPLICATION with ANY DATA at ANY LOCATION*. It combines process-based approach with application and partner integration. It allows customers to integrate disparate information sources, databases and software applications both within and across an enterprise. It has the ability to seamlessly connect with customers, partners, and co-workers while utilizing their existing heterogeneous IT landscape. It combines powerful data transport functionality with comprehensive data mapping and transformation capabilities. It is perfectly suited for Enterprise Application Integration (EAI).

B2B INTEGRATION SUITE

Adeptia Business to Business Integration (B2Bi) Suite is an enterprise-class software product that is designed to integrate CUSTOMER and PARTNER DATA with ANY APPLICATION or DATABASE using industry standards such as EDI, EDIFACT, RosettaNet, HIPAA/HL7, ACORD AL3/XML etc. It combines process centric and services (SOA) based approach with application and partner integration. B2Bi Suite easily and quickly automates data flows and connects internal applications with external partners using industry-specific standards.

ETL SUITE

ETL Suite is comprehensive software that combines *data transport with powerful metadata management and data transformation capability*. It uses Service Oriented Architecture (SOA) and a process-based model to create flexible and loosely coupled data flows that suit any aggregation or data warehousing solutions. Data Transformation Server offers a powerful middleware application to document, automate and execute critical data processes especially for creating and populating data marts from various internal or external data sources. This allows data to be received from multiple sources in different formats and mapped to a common database schema. This enterprise-class software allows companies to centrally manage their data schema and mapping rules in a central repository and directly archive those rules in PDF documents for easy sign-off.

Most services of Adeptia are available with all the Adeptia Suite products. A table is displayed at the beginning of each service. This table outlines the Adeptia products for which the service is available. Additionally, most services are available with the Adeptia base license. But some services are not available with the base license and have to be paid for. These paid services vary with licenses. This document describes all the services that are available with the base license as well as those that are paid services. For details on paid services based on licenses, please contact Adeptia support.

TARGET AUDIENCE

The Adeptia Suite can be used by the following users:

- *Administrators*: These users (for example, IT Professionals) can create and manage Adeptia Suite objects (activities), administer activities such as user creation, update, and execute process flows.
- *Developers*: These users can use activities offered by Adeptia Suite to design, create and execute activities, process models and process flows.
- *Business Users*: Business users can view and monitor tasks, solution and performance reports of all activities and users created in Adeptia Suite.

OVERVIEW

4 OVERVIEW OF ADEPTIA SUITE

This chapter covers the following topics:

- [Architecture of Adeptia Suite](#)
- [Key Terms used in Adeptia Suite](#)
- [User Types defined in Adeptia Suite](#)
- [Structure of Adeptia Suite](#)
- [Top-Down vs Bottom-Up Approach](#)

ARCHITECTURE OF ADEPTIA SUITE

Adeptia Suite is a Java-based application designed using the J2EE framework. It is built using the state-of-the-art technologies and open standards. It uses XML, XSLT, Java (JMX, JDO, JCA, JMS, etc) Swing and web services. XML is the core data format used in the integration component. However, the application supports a wide range of disparate formats and structures.

The Adeptia Suite utilizes the typical N-tier application architecture. This is displayed in Figure 4.1.

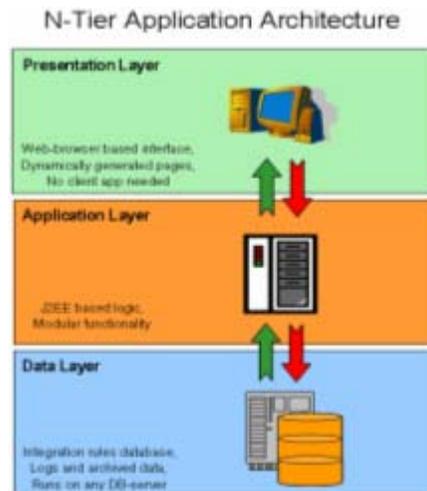


Figure 4.1: N-Tier Application Architecture

Its unique feature is that Presentation Layer is completely web-based, and thus can be used by business users or developers from anywhere at anytime. The user-interface layer is used by developers at design time and by business users at run time to interact with workflow tasks. The Application Layer is a set of java-based server side programs residing on the central server and is used for executing process flows. The Data Layer represents the database, where all business rules, design rules, activity instances and process flows are stored. Run time logs are also stored in the database.

The Adeptia Suite follows a Hub-and-Spoke model in terms of deployment in an IT infrastructure. It acts as a central hub, with connections to other systems and external partners as spokes in this model. It is the main server that implements and executes process flows and integrations. It achieves great scalability in performance using its clustering feature. Additionally, it follows a Store and Forward framework. Any incoming data can be archived and then converted into an XML format for further processing.

Modular Design

Adeptia Suite leverages a modular architecture that facilitates greater flexibility and extensibility. This modular design is depicted in Figure 4.2.

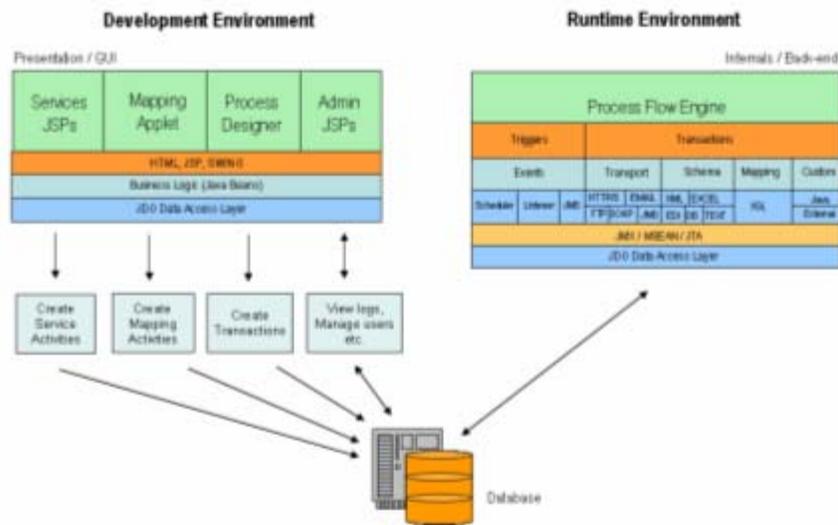


Figure 4.2: Modular Design

This approach has enabled the application to offer additional features and functionality. The biggest advantage is that the customers can easily expand the product and add their own custom modules for serving their business needs.

The N-tier architecture easily segregates the Presentation, Application and Data layers into independent modules. The Adeptia Suite functionality is further separated into independent modules. For example, in the Application layer, the Process Engine, Events, Transport, Transformation and Workflow features are all parts of separate modules.

This modular design facilitates the expansion of the Adeptia Suite by adding custom programs as new services in the process flow. Custom transports and application integration components can be easily configured to access legacy systems. Custom parsers, schemas can be added to support additional file formats.

Scalability

Adeptia Suite supports distributed execution by clustering of multiple nodes that run parallel on separate servers for load balancing and failover capability. This enables scalability both in terms of processing large data volumes, and large number of concurrent transactions.

To enable clustering, the Adeptia Suite is installed on a set of servers that act as nodes in a cluster. A cluster actually represents multiple instances of the Application layer, each running on a separate server, and sharing one back-end data layer i.e. the database. The Presentation Layer also runs from one server.

To create a cluster, a network of nodes is created. One node acts as the primary node and the other nodes are secondary nodes. When process flows are triggered, they are distributed among the nodes of the cluster for execution. If a secondary node goes down in a cluster, it is taken out of the available list and the process flow execution is distributed among the other secondary nodes in the cluster. If a primary node goes down in the cluster, then a secondary node is automatically assigned as the new primary node which continues the process flow execution.

A simple round-robin algorithm is used for distribution in the cluster. A complete process flow is assigned to a node for execution, thus ensuring that every activity of the process flow is run from that node.

Service Oriented Architecture

Customers deploy business solutions in the Adeptia Suite, based on the Service Oriented Architecture (SOA). Its unique feature enables the Adeptia Suite to allow SOA for a heterogeneous environment of Web services and other services.

The Adeptia Suite achieves to be a successful and complete service-based solution by offering a wide range of services. These are outlined as:

- Ability to create independent, reusable services or activities
- Manage repository of these services or activities
- Ability to organize tasks in a process flow that represents a business function
- Ability to expose these business processes to be used by other applications

Many services such as triggers, data transport, transformation, workflow and web services are pre-built in the Adeptia Suite. Developers create instances of these services, which are referred to as activities. These activities are reusable in multiple process flows. Developers can create custom services or add existing activities into the Adeptia Suite. These services can be web services or custom programs. All these services are added in a service repository and activities may be assigned to these services with varied user permissions.

Process flows are created by sequencing individual activities together to create a complex and fully functional business process flow. A process flow represents a complete business operation such as 'Manage and process web site orders'.

A process flow can also be used in another process flow. It can be called as a sub-process in another process flow. Additionally, it can be published as a Web service and used in other processes or applications.

Deployment Model

Adeptia Suite is delivered as a single product and can be deployed with one installation exercise. It is opposed to its competitor products that adopt a tool-kit approach and require installation of many different tools and products.

When the Adeptia Suite is installed on a server, it installs all code modules related to Presentation, Application and Data layers. The back-end database can be installed on the same server or on another database server.

Depending upon the expected data and transaction volumes, clustering of nodes is setup facilitating enhanced performance and scalability. Similarly, backup database can be setup to ensure higher uptime. The deployment model is depicted in Figure 4.3

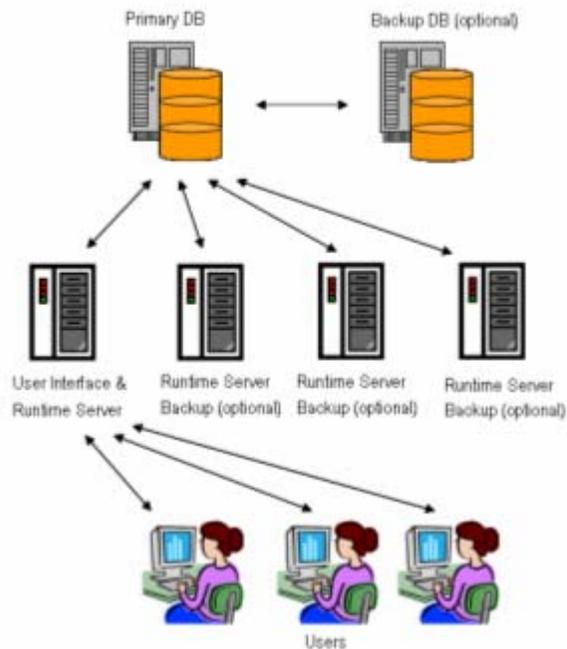


Figure 4.3: Deployment Model

The typical deployments of the Adeptia Suite in a customer environment are described below:

- **Production Server:** This will be the instance of the Adeptia Suite that is used for the final production environment. There will be multiple production servers to create a cluster.

- **Development Server:** This will be the instance of the Adeptia Suite that is used by developers for design, creation and development of activities and process flows. Once a process flow is complete, it is migrated to the Production Server for deployment.
- **Staging and Testing Server:** This will be the instance of the Adeptia Suite that is used when the process flows are complete and before they are deployed on the Production Server. The process flows are used for staging, testing and user acceptance. This is optional and may be combined with the Development Server.

KEY TERMS USED IN ADEPTIA SUITE

The key terms used in the Adeptia Suite are defined in the table below.

Table 4.1: Key Terms used in Adeptia Suite

Terms	Definition
Service	A service is a type or class of distinct business tasks or actions. It represents a specific feature category of the product. The Adeptia Suite supports many pre-built services such as FTP, Email, Database, etc. Additionally, it also allows users to add a customized service such as an external custom program.
Activity	An activity is an instance of a service. It is an actionable business task and is executed at runtime.
Process Model	A Process Model is a tool for representing business processes of an organization, such that the current processes may be analyzed and improved in the future. It acts a blueprint for a process flow.
Process Flow	A Process flow is a set of activities arranged in a sequence to perform a specific task(s). It is created by connecting various activities that are then executed in the run-time environment.
Trigger	A trigger is an event that initiates the execution of a process flow. It is required to deploy a process flow.
Business Users	Business users are analysts and managers who work on a business process flow that is automated with the Adeptia Suite. They own the process flow, specify the business rules, make decisions and monitor the progress. They interact with developers during design time to specify the requirements of the process flow to be deployed. Once it is deployed, they interact with the running process flow using the Human Workflow service. Primarily, they interact with the Adeptia Suite at run time.

Developers	Developers are the IT team members who design and implement the activities and the process flows, in addition to managing the Adeptia Suite on an ongoing basis. They interact with the Adeptia Suite primarily during design time. External consultants who help in deploying the Adeptia Suite too are referred to as developers.
WebDAV	Web-based Distributed Authoring and Versioning (WebDAV) is a standard for the exchange of data between web authoring tools and web servers. It is a set of extensions to the HTTP protocol that enable editing of documents on a remote web Server.
Workflow	A workflow service allows business users to interact with running process flows. It is an instance of a service that relates to a specific task done by a specific business user in a specific manner.
Control Flow	A control flow represents the sequence of execution of activities in a process flow. All business rules and logic of a process flow are enforced by a control flow.
Decision Node	A decision node is a type of control flow that determines which activity is to be executed next, based on the prior results of the process flow.
Design time	Design time is referred to the phase when business users document and developers design and create activities and process flows.
Run time	Run time is referred to the phase when the process flow that has already been deployed, is executed.

USER TYPES DEFINED IN ADEPTIA SUITE

There are four types of users defined in Adeptia Suite:

- [Admin](#)
- [Group Admin](#)
- [Developer](#)
- [Business User](#)

Admin

The *Administrator* (usually referred to as *Admin*) is pre-created in Adeptia and is entitled to all administrative tasks. The other users are created by the Administrator.

Group Admin

Each group has one or more "*admin*", who is able to manage the users within that group. A *Group Admin* can create, edit and delete users within its group. *Group Admin* can also change the permissions of users and perform various tasks.

Developer

A Developer can create activities and design the workflow of the Adeptia Suite.

Business User

A Business User can manage all tasks assigned to the user or his group, executes his solutions, monitor solutions and performance of users, and view all Adeptia Suite Logs. A business user's view can be categorized as:

- Normal
- Limited

Normal

A Business User with Normal view can see following workspace menu items:

- My Task
- My Documents
- My Solutions
- My Monitor
- History

Limited

A Business User with Limited view can see following workspace menu items:

- My Task
- My Documents
- My Solutions
- My Monitor



For details, refer to the *Admin Guide*.

STRUCTURE OF THE ADEPTIA SUITE

The Adeptia Suite is divided into five sub-systems:

- [My <Items>](#)
- [History](#)
- [Data Interface](#)
- [Design](#)

- [Configure](#)
- [Deploy](#)
- [Administer](#)

My <Items>

The **My <Items>** section of Adeptia Suite allows *business users along with Process Owners and Process Participants* to perform their daily tasks such as managing their tasks, documents and solutions. It helps Process Owners in monitoring processes, user performance and viewing their usage reports.

This section comprises of the following functions:

My Tasks

- **Task Manager:** This is used to view and manage all tasks assigned to you or your staff (if you are a manager).
- **Task History:** This is used to view the history of tasks of a process flow instance or tasks based on search criteria.

My Documents

- **Document Manager:** This is used to view and download documents associated with a process flow or tasks associated with a process flow or WebDAV folders using the Document Repository feature.

My Solutions

- **Using My Solutions:** These are web-based forms that are created with links by a developer. They appear on the Workspace menu and are used to perform an action such as filling the web-based form, etc.

My Monitor

- **Solutions:** This is used to view, execute and monitor instances of all process flows within a specified date and time range. You can also view details of all tasks associated with a process flow.
- **User Performance:** This is used to view and performance of all users. It displays details of all instances of tasks assigned to a user or business role.
- **Usage Report:** This is used to view the performance report of a user group.
- **Events:** This is used to view the status of events.
- **Reports:** This is used to view a customized process flow report.

History

The **History** section of Adeptia Suite allows *developer and admin users* to view the history of user's actions, events execution, process flow execution and running of the Adeptia Suite.

This section comprises of the following logs:

- **Audit Trail:** This is used to view a list of all changes made to Adeptia Suite activities. It includes creating, editing, deleting and saving of activities. It also includes comments, change of password and login/logout details.
- **Event Log:** This is used to view only those messages that are related to triggers and events of Adeptia Suite.
- **System Log:** This is used to view all messages associated with Adeptia Suite. It also includes change of password and login/logout details.
- **Process Flow Log:** This is used to view details of execution of a process flow and its associated activities. It also includes the status of the process flow (as Parent or Child).

Data Interface

Data Interface is used to configure activities which can be overridden at execution time of the process flows. Using this interface, you can attach an event with the process flow and the activities that will be overridden at execution time of the process flows.

Design

The **Design** section of Adeptia Suite allows *developer with a process analyst role* to document analyze and simulate business processes.

This section comprises of the following function:

- **Process Model:** This is used to analyze, document and design effective business process flows. Once the model is created, it also helps simulate the process model.
- **Process Flow:** This is used to allow users to create customized process flows using BPMN Notations.

Configure

The **Configure** section of Adeptia Suite allows *developer with process automation role* to implement process flows in order to automate them. It includes creation and implementation of all activities and services that are used to create the process flow and then automate it.

This section comprises of the following functions:

Forms

- **Web Forms:** This is used to create customized forms. They can be created manually, using a pre-defined template or using the Frevvo tool.

WorkFlow

- **Workflow Task:** This is used to manage the interaction of a user with the running process flows. You can enter their inputs in the system, in order to automate a decision at certain point of running a process flow.

Services

- **Data Dictionary:** This is used to create and define record definitions that are commonly used in schemas. It can be created for following types of schemas:
 - **Positional:** This is used to create and record definitions commonly used in Positional schemas.
 - **EDI:** This is used to create and record definitions commonly used in EDI schemas.
- **Source:** This is used to identify specific data set (i.e., flat file, XML or database record) to be created, its location, and the transport protocol to be used to retrieve this data. It can be used to create the following source types:
 - **Adv. Database:** This is used to provide ability to specify multiple tables of a database source.
 - **Database:** This is used to provide ability to specify a database as a source.
 - **File:** This is used to provide ability to specify any file that is located on the local hard disk as a source.
 - **FTP:** This is used to provide ability to specify any file that is accessible via FTP as a source.
 - **HTTP:** This is used to provide ability to specify any file that is accessible via HTTP as a source.
 - **JMS:** This is used to provide ability to specify a message of a queue or topic of a JMS Server as a source.
 - **LAN File:** This is used to provide ability to specify any file that is accessible on the network as a source.
 - **Mail:** This is used to provide ability to specify any file that is accessible via mail as a source.
 - **WebDAV:** This is used to provide ability to specify any file that is stored in the WebDAV Server as a source.
- **Schema:** This is used to identify how a file is to be read or written. It allows you to define meta-data rules for reading or writing data from text files, database tables, or XML files. It can be used to create the following schema types:
 - **Adv. Database:** This is used to provide ability to specify how data from multiple tables can be obtained and inserted in selected tables.
 - **Adv. Positional:** This is used to provide ability to read data from a multiple record format positional file and write data into a multiple record format.
 - **Adv. Text:** This is used to provide ability to read data from a text file with multiple record format and multiple field separators, and write it into

another text file with multiple record formats and multiple field separators.

- **Database:** This is used to provide ability to read data from a database table and to insert/update/delete data into a database table.
 - **Excel:** This is used to provide ability to read data from an Excel file and write data into an Excel file.
 - **Positional:** This is used to provide ability to read data from a Positional file and to write it into a Positional file.
 - **Text:** This is used to provide ability to read data in a pre-defined format from a text file and write it into a pre-defined format in a text file.
 - **XML:** This is used to provide ability to read data from an XML file and write it into an XML file.
 - **XML Validator:** This is used to validate a part or complete XML file.
 - **EDI:** This is used to manage data in an EDI format.
-
- **Target:** This is used to identify specific data set (i.e., flat file, XML or database record) to be created, its location, and the transport protocol to be used to send this data. It can be used to create the following target types:
 - **Adv. Database:** This is used to provide ability to specify multiple tables of a database as target.
 - **Database:** This is used to provide ability to specify a database as a target.
 - **File:** This is used to provide ability to specify the name and path of a file to be created as a target.
 - **FTP:** This is used to provide ability to specify any file location that is accessible via FTP as a target.
 - **HTTP:** This is used to provide ability to specify any file that is accessible via HTTP as a target.
 - **JMS:** This is used to provide ability to specify a message of a queue or topic of a JMS Server as a target.
 - **LAN File:** This is used to provide ability to specify any file that is accessible on the network as a target.
 - **Mail:** This is used to provide ability to specify any file that is accessible via mail as a target.
 - **WebDAV:** This is used to provide ability to specify any file that is stored in the WebDAV Server as a target.
-
- **Web Services:** This is used to publish and consume Web Services. It can be used to create the following web services:
 - **Security Policy:** This is used to provide ability to create a security policy for a web service.
 - **Consumer:** This is used to provide ability for a consumer to locate a web service and invoke its operations. It can be located using UDDI and URI.
 - **Provider:** This is used to provide ability to publish process flows that are used by a Web Service Consumer.

- **Data Transform:** This is used to transform data from one format to another. It can be done by the following methods:
 - **Data Mapping:** This is used to map and convert source data to target data format. Mapper utilizes the source and target schema activities to enable element to element data mapping and application of complex business rules.
 - **Record to Record:** This is used to provide ability to take one record at a time and process it according to defined logic using java programming construct and generate output of one record at a time.

- **Extensions:** This is used to create custom plugins. It can be done by the following method:
 - **Custom Plugin:** This is used to create a scripted service that can process data in a customized manner using java-programming constructs and provides an extension point for adding any customized data processing logic.

- **Native Service:** This is used to run the .EXE, .BAT and .SH files asynchronously during the execution of process flow. It can be done by the following method:
 - **Native Call:** This is used to run the .EXE, .BAT and .SH files asynchronously during the execution of process flow.

- **Notification:** This is used to send e-mail at certain points in a process flow. It can be done by the following method:
 - **Mail Notification:** This is used to send mail to users about the execution status of a process flow.

- **Polling:** This is used to allow the Process flow to 'wait' and 'listen' to the arrival of new or updated data at a pre-defined location before it executes subsequent activities. It can be done by the following methods:
 - **Database:** This is used to check any changes in the data stored in the database table.
 - **File:** This is used to check the arrival or modification of file(s) on the Local LAN location.
 - **FTP:** This is used to check the arrival or modification of a file(s) on a FTP location.
 - **Mail:** This is used to 'listen' for the arrival of any mails on the mail Server.

- **Connectors:** This is used to define the connectivity to Database Server or JMS Server. It can be done by the following methods:
 - **Database Driver:** This is used to create a database driver.

- **Database Info:** This is used to create database info activity.
- **JMS Provider:** This is used to create JMS Provider activity.

- **Miscellaneous:** This is used to create the Context Upload and Context Download variables and generate custom reports for process flows that are already executed. It also includes creating of stored procedures. It can be done by the following methods:
 - **Context Download:** This is used to generate XML from a context variable.
 - **Context Upload:** This is used to map any field of a schema to the Process Flow Context Variable.
 - **Stored Procedure:** This is used to encapsulate a set of operations or queries to execute on a database server.

Reports and Dashboards

- **Custom Report:** This is used to execute a custom report.
- **Dashboard Component:** This is used to create components such as Bar Charts, String Charts, Table Charts and Pie Charts.
- **Dashboard Design:** This is used to create the design of the dashboard.

Deploy

The **Deploy** section of Adeptia Suite allows *developers to define the conditions* when process flow should be executed. It includes creation of Events and Triggers and binding those events or triggers with the process flow.

This section comprises of the following functions:

Events and Triggers

- **Calendar Event:** This is used to specify the recurring execution of process flow between the specified dates in conjunction with a specified calendar.
- **Database Event:** This is used to schedule a process flow to be triggered when a record is inserted, updated or deleted in a database table.
- **Event Registry:** This is used to create the event registry.
- **File Event:** This is used to specify when and how frequently a process flow should be executed based on either creation of a new file, or existence of a file(s) in a pre-defined location or upon its modification.
- **FTP Event:** This is used to specify when and how frequently a process flow should be executed based on either creation of a new file, or existence of a file(s) on a FTP Server or upon its modification.
- **HTTP Trigger:** This is used to schedule a process flow to be triggered when an HTTP request is made to Adeptia Suite. It also allows the request to pass the data to the process flow. The trigger can be used by a HTTP client application to integrate with process flow, deployed on the Adeptia Suite.
- **JMS Event:** This is used to specify when and how frequently the process flow should be executed if any message is updated in a queue or topic of a JMS Server.
- **Mail Event:** This is used to schedule a process flow to be triggered when a specified mail arrives on the mail Server.
- **Timer Event:** This is used to specify the date, time and frequency at which a process flow should be executed.

- **Web Service Trigger:** This is used to allow a Web Service client to trigger any process flow in Adeptia Suite.

Administer

The **Administer** section of Adeptia Suite allows *Sys Admin and Group Admin users with Administrator role* to manage users, groups and business roles. It also allows you to manage Scheduler and Kernel and manage the configuration of the Adeptia Suite.

This section comprises of the following functions:

Setup

- **Application Settings:** This is used to view System Configuration and update System Properties of the Adeptia Suite.
- **Group:** This is used to create and manage user groups.
- **User:** This is used to create and manage users.
- **Business Role:** This is used to create and manage business roles.

Maintenance

- **Kernel:** This is used to manage the kernel and manage process flow status when the kernel is paused or stopped.
- **Scheduler:** This is used to manage the scheduler and manage events when scheduler is stopped.

Security

- **Secret Key:** This is used to create, import and export a secret key.
- **Keystore:** This is used to create Keystore and import security certificates.

System Status

- **System Monitor:** This is used to view running activities and memory usage of the system. It displays information about the nodes that are part of cluster, details of each node in the cluster and the Process Flow Execution Report.

TOP-DOWN VS BOTTOM-UP APPROACH

In order to automate a business process flow, the Adeptia Suite can be used in two ways:

- [Top-Down approach](#)
- [Bottom-Up approach](#)

To understand these two approaches, assume the following scenario:

Scenario

A manager needs to process a purchase order based on the purchase value. If the purchase amount is less than \$50,000, then the purchase order is sent to the VP for approval. If the purchase amount is greater than \$50,000 then the purchase order is sent to the Director for approval.

To automate this scenario, process flow can be created using either Top-down approach or Bottom-Up approach.

Top-Down Approach

A business user, who is not technically proficient, can use the Top-Down approach. A business user may not know how to create different activities or the parameters that need to be entered in the activities. In this case, he/she can draw a blueprint of the process flow in Process Designer. Process Designer has different BPMN objects which can be used to draw the blueprint of the process flow. Now rest of the task can be assigned to developer or technical person, who is responsible to implement this process flow. The technical person will create each activities required for this process flow and attach it the blueprint of process flow.

The activities required to create the process flow are outlined as:

- **File Source:** Used to specify the text file containing the purchase order as the source. It is stored in the local drive. It picks up the file and passes it to the other activity.
- **Context Target:** Used for putting the data of the text file into the context of the process flow.
- **Context Source:** Used for taking the data from the context of the process flow and sending it to the decision node.
- **Decision Node:** Used to decide whether the purchase order is to be sent to the VP or the Director.
- **Repeater:** Used to send the stream coming from the Context Source to the File Target activity and the Decision node.
- **File Target:** Used to save a copy of the purchase order in the specified location.
- **Mail Target:** Used to send purchase order either to the VP or the Director, based on the purchase value amount.

Bottom-Up Approach

If it is the sole responsibility of a technical person to create a process flow, he/she does not need to first draw the blue print of the process flow and then create the activities. He/She can directly create the listed activities, and use them to create a process flow.

LOGIN DETAILS

5 LOGIN INTO ADEPTIA SUITE

This section helps you start the Adeptia Suite and introduces you with the Adeptia Suite Home page. It covers the following information:

- [Pre-Requisites of using Adeptia Suite](#)
- [Starting Adeptia Suite Kernel and Web Runner](#)
- [Login into Adeptia Suite](#)
- [Change Password](#)

PRE-REQUISITES OF USING ADEPTIA SUITE

Software requirements for client machine, which you will use to access Adeptia Suite, are outlined as:

- Java Runtime Environment (JRE) 1.6
- Internet Explorer 6 or 7 (Java enabled) browser installed on the PC.

	Internet Explorer 6 and 7 are the only certified web browser for Adeptia Suite.
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- Acrobat Reader to view PDF files generated by Process Modeler, Process Designer and Data Mapper.

	<p>In case JRE 1.4.2 or JRE 1.5 is installed on the client-end PC, then the applets will automatically download JRE 1.6 from the JAVA website.</p> <p>If you have JRE 1.6 installed on the client machine, you need to disable JRE Auto update feature. To know how to disable JRE Auto Update, refer to Disabling JRE Auto Update section.</p> <p>Incase you are accessing Adeptia Server from the machine where Kernel and WebRunner are running, then the softwares required for client machine must be installed there.</p> <p>The <i>Pop-Up Blocker</i> needs to be disabled in the web browser, in order to open the applets. By default, the <i>Pop-Up Blocker</i> is enabled.</p>
---	---

STARTING KERNEL AND WEB RUNNER

Before login into Adeptia Suite, you need to start the Kernel and Web Runner.

	<p>If you have installed Adeptia Server as Windows service, skip this section. Adeptia Server Kernel and Web Runner automatically start during windows startup. For more details, refer to Adeptia Server Installation Guide.</p>
---	---

Steps to start the Adeptia Suite Kernel and WebRunner

1. Click **Start > Programs > Adeptia Suite** and then select **Adeptia Kernel**. The console window is displayed with kernel message (see Figure 5.1).

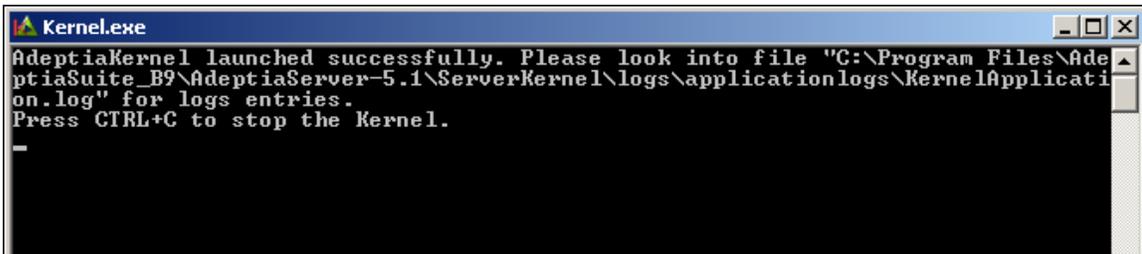


Figure 5.1: Starting Kernel

2. To start the WebRunner, click **Start > Programs > Adeptia Suite** and then select **Adeptia Suite WebRunner**. A new console window is displayed with the Web Runner message (see Figure 5.2).

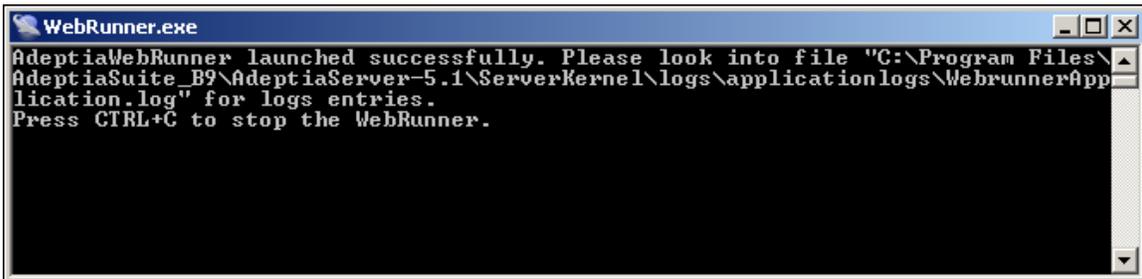


Figure 5.2: Starting WebRunner

	<ul style="list-style-type: none"> ▪ To learn how to start kernel in clustering mode, refer to <i>Deploying Clustering</i> section in <i>Admin Guide</i>. ▪ To stop the Kernel and WebRunner, use <Ctrl>+ <C>. If you close Kernel and WebRunner DOS windows by clicking on the cross (close) button, Java Virtual Machine (JVM) used by Kernel and WebRunner may not shut down properly. ▪ When Kernel and WebRunner is started, output of the Kernel and the WebRunner is written into <i>KernelApplication.log</i> and <i>WebrunnerApplication.log</i> files respectively. These files are located in <code><AdeptiaServerInstallFolder>/AdeptiaServer-5.1/ServerKernel/logs/applicationlogs</code> folder of Adeptia Suite. To change the location of these files, you need to set the values
---	---

	<p>of <code>abpm.kernelout.file.location</code> and <code>abpm.webrunnerout.file.location</code> properties for Kernel and WebRunner respectively. To know how to change the value of these properties, refer to the <i>Updating System Properties</i> section of Administrator Guide for details.</p> <ul style="list-style-type: none"> ▪ The maximum size of any of these file can be up to 20 MB. When this size is reached, the existing file is renamed with the current date and time stamp added to the original file name. Now, a new file is created with the same name as that of the original file and the output of the Kernel (or WebRunner) is written into this new file. ▪ To change the size of above said files, you need to set the values of <code>abpm.kernelout.file.maxSize</code> and <code>abpm.webrunnerout.file.maxSize</code> properties respectively. To know how to change these properties refer to the <i>Updating System Properties</i> section of Administrator Guide for details.
--	---

LOGIN INTO ADEPTIA SUITE

Steps to login into the Adeptia Suite

1. Start the Internet Explorer browser and type the address in the address bar <http://hostname:8080/adeptia/control/> . The Adeptia Suite login screen is displayed (see Figure 5.3).

	<ul style="list-style-type: none"> ▪ "hostname" in the address is the name of the Server on which Adeptia Suite is running. For example if the Adeptia Suite is running on a Server named Adeptia, the URL will be http://adeptia:8080/adeptia/control/ ▪ If Adeptia Suite is running on local machine, the URL will be http://localhost:8080/adeptia/control/ ▪ The Adeptia Suite is tested only on Internet Explorer.
---	--



Figure 5.3: Adeptia Suite Login screen

2. Enter the ID of the user in the *User ID* field.
3. Enter the password in the *Password* field.

	<ul style="list-style-type: none"> ▪ The password should be a minimum of 6 characters in length and should include a numeric value. ▪ The password will expire after the number of days specified in the Value field, while setting the <i>Expiry Days</i> property. If this value is set to 0, then the password will not expire. By default, this value is set to 0. Additionally, you can generate a password expiry warning to be displayed at the time of login. For example, if 5 is specified in the <i>Value</i> field, while setting the <i>Expiry Message Flash</i> property, then a warning will be displayed 5 days before the password is to expire. It will be displayed each time you login. For changing these property settings, refer to Appendix A: <i>Expiry Days</i> property in <i>Admin Guide</i>. ▪ If the password is already expired, then the Change Password screen is displayed at the time of login.
---	---

4. Click **Login**. The next screen is displayed, based on the user's workgroup. If the user is a member of more than one group, then the login screen is displayed again, with the *Group Name* field (see Figure 5.4). Else, the Adeptia Suite Home Page is displayed with details associated with the logged in user's group (refer to Figure 6.1).



Figure 5.4: Adeptia Suite Select Group screen

	<p>The <i>Group Name</i> drop-down menu is populated with only those groups of which the logged-in user is a member.</p>
---	--

5. Select the group with which the user wants to login, from the *Group* drop-down list.

	<p>A user can be a member of more than one group. But he can login and access objects associated with one group at a time. For example, a user is a member of two groups: <i>Administrators</i> and <i>Executives</i>. Both these groups vary in terms of objects. He can login as a member of either the <i>Administrators</i> or the <i>Executives</i> group at a time.</p> <p>For detailed information on groups, refer to the <i>Creating and Managing User Groups</i> section in <i>Admin Guide</i>.</p>
---	---

- Click **Submit**. The Adeptia Suite Home Page is displayed with details associated with the selected user group (see Figure 6.1).

	<ul style="list-style-type: none"> ▪ Default User ID is <i>admin</i> and the password is <i>indigo1</i>. ▪ By default you are logged in the <i>Standard</i> mode. If you want to login into the <i>Secure</i> mode, use the following URL to login into Adeptia Suite: https://hostname:8443/adeptia/control/ ▪ Click Yes to close the <i>Security Alert</i> dialog box. ▪ When you login into the <i>Secure</i> mode, the data transfer from your PC to the Server happens in encrypted form and through a secure channel.
---	--

CHANGE PASSWORD

Steps to change password

- Click **Change Password** on the Adeptia Suite Toolbar. The Change Password screen is displayed (see Figure 5.5).

Change Password	
Old Password	<input type="text"/>
New Password	<input type="text"/>
Confirm Password	<input type="text"/>
<p>Please Note: You must save your work and close all applets (Process Designer, Data Mapper) before changing the password. If password is changed, any work done on the previously open applets will not be saved. To work on the applets re-login with the new password.</p>	
<div style="display: flex; gap: 10px;"> Save Cancel </div>	

Figure 5.5: Change Password

	<p>If the password is expired, then this screen is displayed at the time of login.</p>
---	--

- Enter the old password in the Old Password field.
- Enter the new password in the New Password field.
- Enter the new password again in the Confirm Password field.
- Enter the email id of the logged in user in the Email field.



This field will be displayed only if the email was not configured when creating the user.

6. Click **Save**. This changes the password.



It is mandatory to save all activities and close all applets before changing the password. Else, the changes will not be reflected in the activities and applets.

UNDERSTANDING ADEPTIA SUITE

6 UNDERSTANDING THE ADEPTIA SUITE HOME PAGE

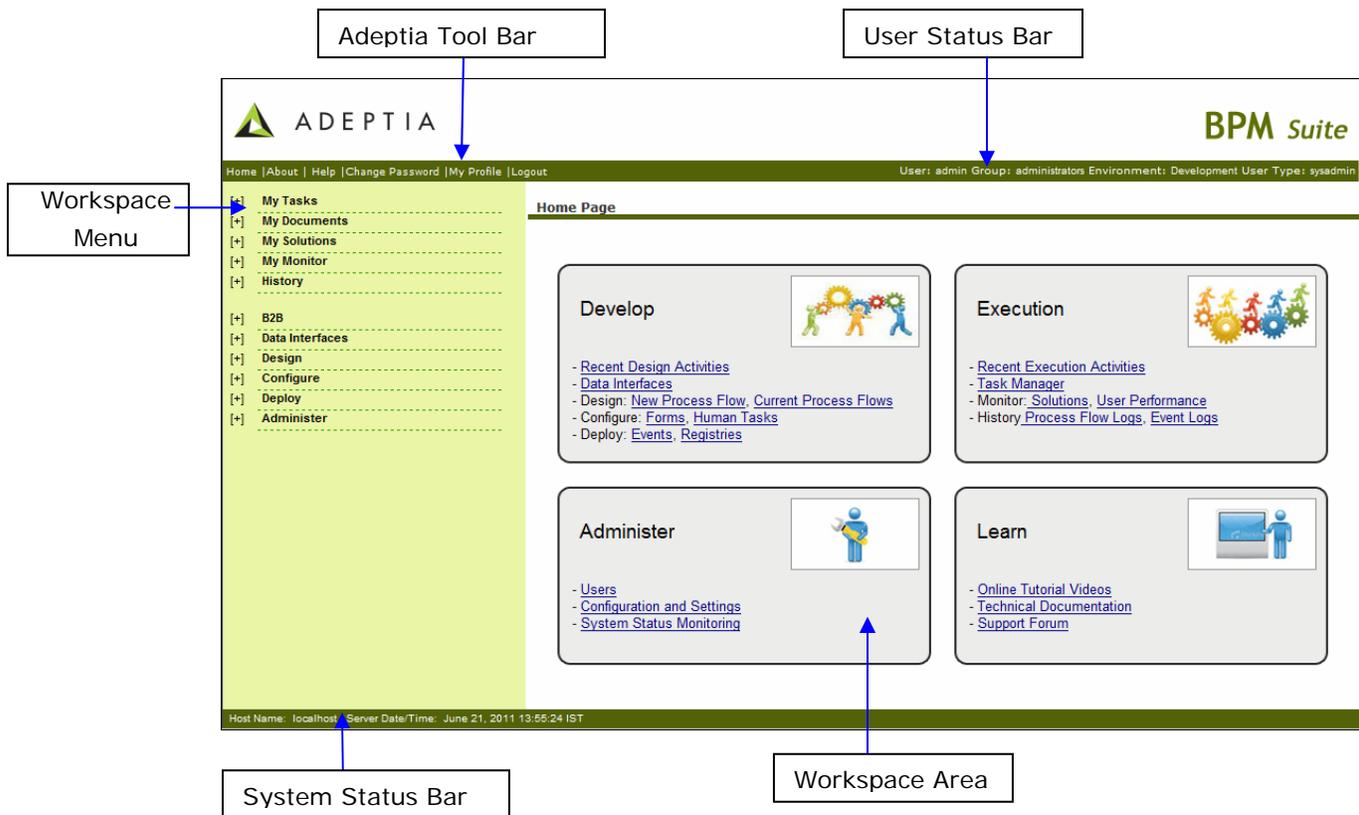


Figure 6.1: Adeptia Suite Home Page

The Adeptia Suite home page is different for different type of user. But overall it is divided into the five sections:

- [Workspace Menu](#)
- [User Status Bar](#)
- [System Status Bar](#)
- [Adeptia Suite Tool Bar](#)
- [Workspace Area](#)

Workspace Menu

The Workspace Menu contains a list of all the services provided by the Adeptia Suite. You can expand and view items of each service by clicking the **[+]** sign.

User Status Bar

The User Status Bar shows the information of the user logged in i.e. User ID, User group, Permissions and User type.

System Status Bar

The System Status Bar shows the host name, date and time of the server where Adeptia Suite is running.

Adeptia Suite Tool Bar

The Adeptia Suite Tool Bar is used to:

- Go to Adeptia Suite Home Page
- View Version and License Information
- Open Adeptia Suite Help
- Change Password
- View User Profile
- Logout from Adeptia Suite

Workspace Area

The Workspace Area is used to create, modify and view Adeptia Suite objects (Users, Groups, Activities and Process Flows etc).

FUNCTIONING OF ADEPTIA SUITE

7 UNDERSTANDING FUNCTIONING OF ADEPTIA SUITE

Adeptia Suite allows you to automate your business process. In order to automate your business process, using Adeptia Suite you have to create a process flow. A process flow consists of different activities. Each activity of Adeptia Suite is equivalent to one step of a business process. This concept is better explained with some real examples. Some process flows are added in the *Evaluation Guide*.

One example is of a simple process flow which includes the *Source*, *Target*, *Schema* and *Mapping* activities. To automate this business process you have to perform the following steps:

1. [Create each of these activities to perform each operation of the business process](#)
2. [Combine these activities to create the process flow](#)
3. [Execute the process flow](#)



This Process flow is already created and bundled with the product. For detailed information of the process flow, refer to *Adeptia Suite Evaluation Guide*.

CREATE ACTIVITIES

You need to create the following activities to perform each operation of the business process:

- **Source Activity:** This defines the location from where the source data is fetched in order to process it.
- **Source Schema Activity:** This defines the method to parse the source data and convert it into intermediate XML format.
- **Target Schema Activity:** This defines the method in which the target file will be written. The target schema converts the data from intermediate XML format into required target format.
- **Mapping Activity:** This defines the functions and rules which you want to apply on the source data, before transferring it to target location. For example you can create a Mapping activity that takes intermediate XML data generated by source schema and gives output to the target schema in XML format.
- **Target Activity:** This defines the location where you want to put the target data after processing.

CREATE PROCESS FLOW

Once you have created these activities, you have to combine these activities to create a process flow. For details on creating a process flow, refer to the *Creating Process Flow* section in the *Developer Guide*.

EXECUTE THE PROCESS FLOW

Once you have created the Process Flow you have to execute it. You can execute a process flow in two ways:

- [Execute Manually](#)
- [Execute a process flow using a particular event](#)

Execute the Process Flow Manually

To execute the process flow manually, you need to select the process flow from the Manage Process Flow screen and click the *Execute* link. For details, refer to the *Creating Process Flow* section in the *Developer Guide*.

Execute the Process Flow using Event

To execute the process flow using event you have to perform the following steps:

1. [Create the required event activity](#)
2. [Bind the Process Flow with the Event Activity](#)
3. [Activate Event Activity](#)

Create Event Activity

An Event is used to define the condition on the process flow is executed automatically.

For example, you want to execute the process flow, when an email from particular sender or with particular subject arrives in your mail box. To define this condition, you need to create a *Mail Event* activity.

Similarly, you can also define the other conditions like process flow should be executed when a record is inserted in particular table of a database. For this you can create a *Database Event* activity.

To know the list of events that you can create and how to create them, refer to *Creating Event* section in *Developer Guide*.

Bind Process Flow with Event

To bind process flow with the Event, you need to create an Event Registry. Basically Event Registry defines which process flow is triggered when conditions defined in the event is met. For details, refer to *Creating Event Registry* section in *Developer Guide*.

Activate Event

After creating the event and binding it with the process flow, you need to activate the event. To activate the event, select the event in the Manage Event screen, and click the *Activate* link. For details, refer to *Creating Event* section in *Developer Guide*.

VIEW PROCESS FLOW LOG

Once your process flow is executed either manually or by event, you may want to know whether the execution is successful or not. You can see the status of process flow in process flow log. To know how to view process flow log, refer to *Viewing Process Flow Logs* section in *Business User Guide*.

AUTOMATING COMPLEX BUSINESS SCENARIOS

The example explained above is of a simple process flow. However, Adeptia Suite enables you to automate more complex business scenarios. It allows you to use:

- **Decision node** in your process flows.
- **Workflow** activity, in case you want some human interaction within your business process.
- **Web Service Provider** activity, if you want to publish your business process as Web Service.
- **Web Service Consumer** activity, if you want to create a business process which can invoke any third party web service.
- **Mail Notification** activity, if you want to send email at any stage of the business process.
- **Custom Plugin** activity, if you want to use any custom java logic to process the data.
- **Native Service** activity, if you want to run any batch or executable program.

BUILT-IN EVAL FLOWS

To demonstrate the advanced features of Adeptia Suite there are six evaluation process flows which are based on some business scenarios. These process flows are explained in *Evaluation Guide*. We highly recommend you to go through the *Evaluation Guide* and try those process flows.

A list of built-in *Evaluation Process Flows* and their high-level description is as follows:

Data Transformation Process Flow

This sample Process Flow demonstrates the use of different mapping functions to transform the source data into required format. This Process Flow is used to extract data (Insurance Policy information) from a database source and convert it into an excel format. Conversion of data from

database specific format into excel format is done using different mapping functions. After conversion, data is written in an excel file and that excel file is saved into the specified location. At the end of the Process Flow, a native call is used to execute a batch file, which creates a log file. This log file contains the details of the excel file, which is created by the process flow.

Scripted Service Process Flow

This sample Process Flow demonstrates the use of Scripted Service and generation of dynamic file name. Scripted Service is used to call Java code to perform the specific task. In this Process Flow a zip file, which contains two different text files, is used as source. Scripted Service calls a Java code, which extracts both the file and concatenates them into single text file. This file is further converted into Excel file and then compressed into a ZIP file. Current date is appended with the name of the zip file, which is then saved in the specified target directory.

Process Designer Process Flow

This Process Flow demonstrates the use of different features of Process Designer. In this Process Flow, a purchase order, which is in text format, is used as source. Values of the purchase order (such as PO Number, Amount, Company Name, and Item) are separated by comma (,). A copy of the purchase order is saved into a specified folder. Another copy of the purchase order is sent to either of the Manager or Director of the company through email. If the purchase amount is less than US\$ 50000, the purchase order is sent to the Manager for approval. If the purchase amount is greater than US\$ 50000, the purchase order is sent to the Director for approval.

Process Flow to Process Excel Data

This sample Process Flow demonstrates the use of different features of process designer and complex mapping functions. The Process Flow is triggered on arrival of emails with different subject. Each mail has an excel file attached to it. Subject of the mail specifies the format of the excel file. Based on subject of the mail, Decision Node of the Process Flow decides which schema to be used to parse data of the Excel file. For example, if subject of email is FORMAT1, Schema1 is used. If subject of email is FORMAT2, schema2 is used. After the data is parsed using either of the schemas, mapping rules are applied and data is inserted or updated into one of the two databases. All error records (e.g. duplicate record) are written into a sequential file.

JMS Event Driven Process Flow

This sample Process Flow demonstrates the use of a JMS Event for triggering a Process Flow. The JMS Event is configured to listen for the data (containing real-time stock quotes) from a JMS server. The JMS Event is registered with the Process Flow. JMS Event on receiving the data, gets fired, and in turn triggers the Process Flow. The Process Flow receives data from the JMS Event, converts it into database specific format and finally inserts the data into a database server.

Record to Record Service Process Flow

This Process Flow is used to process data of a positional file. Data of the positional file is processed record by record. One record is taken at a time, processed and finally sent to JMS server. After the record is inserted to the JMS server at the target end, an email is sent for

acknowledgement and next record is taken for processing. The whole process continues till all the records of positional file at the source end are processed and inserted to the JMS server.

8 ABOUT ADEPTIA INC.

Adeptia, an enterprise software company headquartered in Chicago, Illinois, provides a business process integration technology to easily and quickly automate business processes using industry-specific standards. Adeptia's unique product combines business process management with business-to-business integration. Adeptia's reusable and highly scalable technology has been deployed by Fortune 1000 companies. For more information, visit <http://www.adeptia.com>.

Adeptia Headquarters
443 North Clark St, Suite 350
Chicago, IL 60610
USA
Email: info@adeptia.com

Adeptia India R&D Centre
D-74, Sector 63,
Noida, U.P. - 201301
India

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