

**Application Management User Guide for:**  
**IBM Sterling Order Management**  
**IBM Sterling Catalog and Offer Management**  
**IBM Sterling Configure Price Quote**

Revision: 3.0 Draft

Licensed Materials - Property of IBM.

© Copyright IBM Company 2010, 2011, 2012. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IBM grants limited permission to licensees to make hardcopy or other reproductions of any machine-readable documentation, provided that each such reproduction shall carry the Sterling Commerce and IBM copyright notices and that use of the reproduction shall be governed by the terms and conditions specified by Sterling Commerce in the license agreement for the software and services described in this documentation. Any reproduction or use beyond the limited permission granted herein shall be a breach of the license agreement and an infringement of the applicable copyrights.

---

Licensed Materials - Property of IBM.

© Copyright IBM 2010, 2011, 2012. All Rights Reserved.

# 1 TABLE OF CONTENTS

1	Introduction .....	6
1.1	Support Overview .....	6
1.2	Hardware Environments.....	7
1.3	Subscription Pricing: .....	7
1.4	Upgrades: .....	8
1.5	Configuration Changes.....	8
1.6	Customer Specific Extensions: .....	8
1.7	On-going Support and Administration .....	9
2	Support Levels Descriptions.....	9
2.1	Support Level 1: Customer Application Responsibilities .....	9
2.1.1	Application Administration Support.....	10
2.2	Support Levels 2 and 3: Sterling Commerce Responsibilities .....	10
2.2.1	Server Infrastructure.....	11
2.2.2	Application Support.....	12
2.2.3	Managed Services .....	13
2.2.4	Sterling Commerce Application Code Support .....	13
3	Detailed Infrastructure Support Package: .....	14
3.1	Server Infrastructure Monitoring .....	16
3.2	Application Server Infrastructure Monitoring.....	16
3.3	Synthetic Monitoring or Application Use-Case Monitoring .....	16
3.4	System Management Console .....	17
3.5	Integration/Interface/Data Processes. ....	17
3.6	A Major Production (or Staging) Release is:.....	17

---

Licensed Materials - Property of IBM.

© Copyright IBM 2010, 2011, 2012. All Rights Reserved.

3.7	A Minor Production (or Staging) Release is .....	18
3.8	Sterling Commerce’s standard weekly maintenance window .....	18
3.9	Back Ups .....	18
3.10	Disaster Recovery .....	19
3.11	Data storage allocation .....	19
3.12	Service Requests .....	19
3.13	VPN: .....	19
3.14	Data Refreshes: .....	19
3.15	Shared Reporting Database.....	20
3.16	Shared FTP Service. ....	20
3.17	Shared & Dedicated Email Service.....	20
4	Roles and Responsibilities: .....	20
4.1	Suggested Customer Roles.....	20
4.2	Sterling Commerce’s Resources: .....	21
5	Deployment Procedures .....	22
5.1	Notice.....	22
5.2	Documentation and Process Steps.....	22
5.3	Deployment Scheduling .....	23
5.4	Performance Testing.....	23
6	Severity Level Guidelines .....	24
7	Root Cause Analysis Procedures.....	27
8	Excluded Services .....	27
9	Additional Services Available under a Statement of Work: .....	28
9.1	Onboarding and Implementation Services .....	28
9.2	Application System Improvement Services:.....	28

---

Licensed Materials - Property of IBM.

© Copyright IBM 2010, 2011, 2012. All Rights Reserved.

9.3	Product Training .....	28
9.4	Capacity Planning Assessment .....	28
9.5	Compliance Certification Exercise .....	29
9.6	Transition Services .....	29
9.7	Additional Project Instance for Pre-Production (Development and Test Environments) .....	30
10	Change Control Process: .....	30
10.1	Infrastructure Changes: .....	30
10.2	Application Changes: .....	31
11	End of Contract Data Procedures .....	31

# 1 INTRODUCTION

## 1.1 SUPPORT OVERVIEW

This document provides an overview of the packaged services provided as part of the following products:

- IBM Sterling Order Management As A Service Premium,
- IBM Sterling Configure Price Quote As A Service Premium
- IBM Sterling Catalogue and Offer Management As A Service Premium.

Information on the functionality provided by these applications can be found in the product documentation.

As part of these services Sterling Commerce, an IBM Company, will provide:

- Infrastructure Support
  - Infrastructure includes all server hardware and associated services and software. In the event that an infrastructure issue is discovered by the Sterling Commerce team, we will route the ticket to the appropriate team within Sterling Commerce or Third Party Vendor. Sterling Commerce ownership of the case will insulate the customer from support complexity and provides one point of contact for the customer.
- Sterling Application Services
  - **“Out of the Box” Software Support:** If Sterling Commerce determines an issue is related to “Out of Box Software” then the issue will be managed internally via Sterling Application Support and Engineering Services. As with infrastructure support above Sterling Commerce ownership of the case will insulate the customer from support complexity and provides one point of contact for the customer.
  - **Application Triage.** As part of this service Sterling Commerce will provide case management involving issues with the Sterling Commerce application. As part of application triage, Sterling Commerce will investigate the issue through diagnostic tasks such as application log analysis. If the cause is determined to be related to out of box software code or infrastructure, then Sterling Commerce will manage the case through to problem resolution. If the solution has to be provided from an area of customer responsibility (such as customer specific extensions in the application or an interface to a non Sterling Commerce application) then Sterling Commerce will provide any relevant diagnosis uncovered in the triage process to assist the customer in problem resolution and continue to provide case management through case management tools.

- **Application Monitoring.** Sterling Commerce provides four different types of monitoring. These monitors are designed to assess the entire solution from the physical hardware's health to the performance of the application. Listed from their lowest, most 'physical' levels to their more 'logical' ones these are:
  - **Server Infrastructure Monitoring** - monitors the health and well-being of the physical server hardware
  - **Application Server Infrastructure Monitoring** - monitors the health and well being of the application server infrastructure
  - **"Synthetic" or Application Use-Case Monitoring** - monitors the availability of the actual application screens
  - **System Management Console** – Designed for the customer to use themselves, this monitors the overall system health from the perspective of the application.
- As part of our service to customers, Sterling Commerce will treat any detected application unavailability as a Severity 1 support case and then triage the issue. If the issue is within an area of customer responsibility Sterling Commerce will notify the customer and continue to track the case.

## 1.2 HARDWARE ENVIRONMENTS

The environments that will be provided to the customer are listed below:

	<b>On Demand Premium</b>
<b>Production environment</b>	Single Project Instance
<b>Staging environment</b>	Single Project Instance
<b>Test environment</b>	Single Project Instance
<b>Development environment</b>	Single Project Instance

## 1.3 SUBSCRIPTION PRICING:

Sterling As A Service Premium applications are available as a subscription service so there is no upfront license fee to pay.

## 1.4 UPGRADES:

As Sterling As A Service Premium applications can contain customer specific configurations and extensions, upgrades are controlled by the customer and are undertaken at customer expense.

An upgrade can be defined in two unique parts, version or point releases to the base Sterling Foundations or Upgrades to customer extensions. Upgrades to Sterling Foundation may also include patches and/or hot fixes.

It is left to the customer's discretion to determine which Sterling Commerce issued releases should be applied to the project. A limited number of deployments from development to test to production are included in the agreed subscription price.

Customers or their designated third parties are expected to apply any Sterling Commerce released patches or Hot Fixes to their development and test environments. After customer testing, Sterling Commerce will then migrate these to production as a service Request or Minor production Release. If the migration is an application version upgrade or point release then the migration may be classified as a Major Release. Please see Sections 3.5 and 3.6 for definitions of these terms.

## 1.5 CONFIGURATION CHANGES

Configurations are defined as changes to the application that do not require modifications to software code. Throughout, the application lifecycle, customers retain complete business control over the application and Sterling Commerce allows customers to manage their own configuration settings from the Administration screens.

Customers are responsible for designing and testing their Configurable Models built using the Sterling Visual Modeler in the Staging environment. To promote a model into Production, Customer will submit a Service Request via the Sterling Commerce case tracking system, and Sterling Commerce will be responsible for promoting models from the Staging Environment to the Production environment.

Because the performance of the Sterling Configurator, which 'runs' the Configurable Models built in the Sterling Visual Modeler, is highly dependent on the design quality of the Models, the Customer is responsible for the performance characteristics of the Sterling Configurator.

## 1.6 CUSTOMER SPECIFIC EXTENSIONS:

At times our customers' unique business requirements will require the use of customer specific extensions within their Sterling Commerce deployment. The Sterling As A Service Premium offering allows for the deployment of customer extensions by the customer or their



designated party. However, these extensions are not supported by Sterling Commerce as part of this offering. Customers are expected to arrange support and related troubleshooting themselves, or can separately contract Sterling Commerce for this type of service.

## 1.7 ON-GOING SUPPORT AND ADMINISTRATION

All customers will "raise" and "work" cases via IBM Support portal <http://www-947.ibm.com/support/entry/portal/Overview>. The support areas of this solution are driven by IBM's case management system.. The customer will access and work their cases via the IBM Portal, and Sterling Commerce personnel will use IBM's case management system to manage cases.

## 2 SUPPORT LEVELS DESCRIPTIONS

### 2.1 SUPPORT LEVEL 1: CUSTOMER APPLICATION RESPONSIBILITIES

The customer is responsible for application operation related issues. The customer "owns" the application and its administration and operations. To draw a metaphor with Microsoft Word, Microsoft is responsible for the code base, hot fixes and security patches of the base software package; the customer is responsible for the operation of the application (e.g. using the spell checker). The customer is responsible for setting up and maintaining a helpdesk function for managing all Level 1 support issues.

In order to resolve "How do I" questions from end users Sterling Commerce recommends that the customer's Level 1 help desk staff are full trained in the application and have access to documentation.

Details of available training can be found here:

<http://www-304.ibm.com/jct03001c/services/learning/ites.wss/zz/en?pageType=page&c=Z380210I22756D57>

Documentation is online here within Sterling's Customer Center (registration is required):

<http://publib.boulder.ibm.com/infocenter/sfsf/v9r1/index.jsp>

If an issue cannot be resolved via the Level 1 helpdesk, then the incident can be escalated to Sterling Commerce.

Below are some examples of customer Level 1 Helpdesk responsibilities.

## 2.1.1 Application Administration Support

	CPQ	Offer Management	Order Management
<b>User Management</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Catalog Management</b>	<b>X</b>	<b>X</b>	
<b>Sterling Visual Modeler Management</b>	<b>X</b>		
<b>Inventory Management</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Order Management</b>			<b>X</b>
<b>Application Manager Administration</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>System Management Console</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Quote Management</b>	<b>X</b>	<b>X</b>	
<b>Promotion Management</b>	<b>X</b>	<b>X</b>	

## 2.2 SUPPORT LEVELS 2 AND 3: STERLING COMMERCE RESPONSIBILITIES

Sterling Commerce is responsible for monitoring and maintaining the health and well being of the application behind the Sterling Commerce firewall.

There are three major areas of Sterling Commerce responsibility:

- 1) **Server Infrastructure:** includes items such as server health and well-being, database infrastructure, and network availability.
- 2) **Application Support:** includes items logically "up the stack" including application server health and well-being, application triage and support and request fulfillment.
- 3) **Managed Services:** Sterling Commerce acts as the customer's on-the-ground expert when dealing with issues and requests. Sterling Commerce provides services such as Program Management, to provide a single point of contact within Sterling Commerce, Custom Case Management and a proven Release Management methodology.

Level 2 and Level 3 Support would include the following:

---

Licensed Materials - Property of IBM.

© Copyright IBM 2010, 2011, 2012. All Rights Reserved.

## 2.2.1 Server Infrastructure

Item	Description
<b>Server File system</b>	Sterling Commerce checks that the server file system is healthy.
<b>Log Management</b>	Sterling Commerce manages, audits and archives all server and application logs.
<b>CPU Utilization</b>	Sterling Commerce monitors CPU spikes and performance trending
<b>Memory Management</b>	Sterling Commerce monitors memory utilization, performance trending
<b>Java Virtual Machine Management</b>	Sterling Commerce checks that the JVM is up and running.
<b>Network Availability</b>	Sterling Commerce monitors to the edge of the Sterling Commerce Network
<b>Network Performance</b>	Sterling Commerce monitors performance to the edge of the Sterling Commerce Network
<b>Database performance</b>	Sterling Commerce pro-actively monitors the database server infrastructure for performance abnormalities. Sterling Commerce retains historical record "snapshots" and uses these to tune both the database I/O and load parameters.
<b>Service Request Fulfillment</b>	Sterling Commerce performs as a customer's adjunct employees. Some examples would include retrieving a log file and , running ad-hoc SQL queries

## 2.2.2 Application Support

Item	Description
<b>Application Server Health and Well Being</b>	. Sterling Commerce monitors this key piece of software to make sure that it is performing at an optimal state.
<b>Application Triage and Troubleshooting</b>	Sterling Commerce will investigate, diagnose and resolve application issues related to out of box software and infrastructure. For example, if the as a service application is performing slowly and cause is unknown.
<b>JMS Server/Queues</b>	Sterling Commerce monitors the JMS Server and its queues to ensure that it is up and functioning.
<b>JVM Heap/Thread Management</b>	Sterling Commerce monitors that the JVM is in a healthy state relative to CPU and memory utilization.
<b>Web Server Health and Well Being</b>	Sterling Commerce monitors to ensure the web server is marshalling requests successfully to the application server.
<b>Application Availability</b>	Sterling Commerce monitors the application to check that it is up and available.
<b>Deployment/Release Management</b>	Sterling Commerce manages the deployments of changes to configurations and extensions to staging and production,
<b>Request Fulfillment</b>	Sterling Commerce helps with typical case management activity by retrieve log files etc

---

### 2.2.3 Managed Services

Item	Description
<b>Program Management</b>	The assigned Sterling Commerce Client Manager is the customer's single point of contact throughout the lifecycle of the project.
<b>Customer Case Management</b>	Managing customer issues and requests through Sterling Commerce's case management methodology. Any escalations are managed through the customer's Client Manager.
<b>Change Management Control</b>	Customers are required to follow Sterling Commerce's Methodology for managing infrastructure and application changes.
<b>Deployment/Release Management</b>	In staging and production, Sterling Commerce manages the deployments using Sterling Commerce's Release Management Methodology

---

### 2.2.4 Sterling Commerce Application Code Support

Item	Description
<b>Out of the Box Application Code Support</b>	Supported by Sterling Commerce
<b>Customer Specific Extensions</b>	Supported by the customer or their designee.

### 3 DETAILED INFRASTRUCTURE SUPPORT PACKAGE:

The items and where appropriate quantities or limits are listed here. More detailed definitions of each item follow the table. An \* indicates that higher service levels are available by agreement for an additional fee.

	<b>On Demand Premium</b>
<b>Server Infrastructure Monitoring</b>	<p>Included in Subscription.</p> <p>Sterling Commerce will monitor the uptime of the infrastructure required to run the application and report this to the customer monthly.</p>
<b>Application Server Infrastructure Monitoring</b>	<p>Included in Subscription.</p> <p>Sterling Commerce will monitor the uptime of the infrastructure required to run the application and report this to the customer monthly.</p>
<b>Synthetic Monitoring or Application Use-Case Monitoring.</b>	<p>Sterling Commerce provides three* use-cases that monitor availability of key areas of the solution:</p> <ul style="list-style-type: none"> <li>• <b>Administration:</b> Login as an Administrator to Sterling Business Center</li> <li>• <b>Order Capture:</b> Login as Customer, search the Catalog</li> <li>• <b>Order Management:</b> Login as Customer Service Representation (CSR), search for an order</li> </ul> <p>Customer Specific Extensions or Configurations might require modification to these monitors. In that case, the creation of new monitors or modifications to existing monitors will be at an additional cost*. Monitoring of customer specific processes is provided by Sterling Commerce by arrangement* or by the customer or their designated party.</p>
<b>System Management Console</b>	Customer responsible.
<b>Support for Customer Specific Extensions</b>	Customer responsible
<b>Configuration Changes</b>	The customer is responsible for all configuration changes.

<b>User Support (How do I?)</b>	Part of level 1 support which is a the customer's responsibility.
<b>Integrations / Interface / Data Processes</b>	Up to 10 * can be created by the customer and these will be monitored by Sterling Commerce.
<b>Major Production/Staging Releases</b>	Two per calendar year*
<b>Minor Production/Staging Releases (not including Severity 1 bug fixes)</b>	One per calendar quarter*
<b>Use of Standard Maintenance Windows</b>	For the customer's major and minor release migrations Sterling Commerce's standard weekly maintenance window is currently from 8 PM – 11 PM PST Monday and Wednesday. Non-Standard release windows are optional for an additional fee.*  Sterling Commerce Maintenance Window 2am to 3am PST on Sundays
<b>Back-up Services</b>	One full back-up per week.  Daily incremental back-ups.
<b>Disaster Recovery</b>	RPO of 24 hours  RTO of 5 days. 48 Hour RTO is available*
<b>Bandwidth/sec (Peak)</b>	1 Mbits/sec
<b>Data Storage Allocation</b>	Up to 200GB for Production Environment including Cognos Data Mart and Reporting Database.  Each pre-production environment (Development, Testing, and Staging) has a limitation of up to 50GB of storage.  The customer is responsible for maintaining a data retention policy to ensure they do not exceed their data storage allocation.
<b>Data Refreshes</b>	1 per calendar quarter*

---

Licensed Materials - Property of IBM.

© Copyright IBM 2010, 2011, 2012. All Rights Reserved.

<b>Service Requests</b>	Up to 10 per month*
<b>VPN Service</b>	Up to 1 VPN connection*
<b>FTP Service</b>	Included.
<b>Shared Email Service</b>	Included.
<b>Dedicated Email Service</b>	Not Included*
<b>Shared Reporting Database</b>	Optional Item. A shared reporting database that is additional to Cognos Data Mart is available.*

### 3.1 SERVER INFRASTRUCTURE MONITORING

Infrastructure monitoring includes the health and well-being of the physical server hardware. This would include the monitoring of CPU and memory utilization, file system health, and memory I/O.

### 3.2 APPLICATION SERVER INFRASTRUCTURE MONITORING

Application server infrastructure runs "on top of" the server infrastructure and provides the software and services to support the application. This would include monitoring of the web server, the application server, and the database server.

### 3.3 SYNTHETIC MONITORING OR APPLICATION USE-CASE MONITORING

Synthetic monitoring simply means monitoring "simulated user clicks." Sterling Commerce provides synthetic monitoring to assess the availability of the application from the user's perspective. This is accomplished in an automated way by simulating the click-paths of a given user experience. As part of the subscription, Sterling Commerce provides three use-cases that monitor availability of key areas of the solution:

- **Administration:** Login as an Administrator to Sterling Business Center
- **Order Capture:** Login as Customer, search the Catalog
- **Order Management:** Login as Customer Service Representation (CSR), search for an order



## 3.4 SYSTEM MANAGEMENT CONSOLE

Customers are expected to monitor the System Management Console for themselves. The System Management console monitors the health and well being of the **application** – which is a customer responsibility. This console gives the customer a global view of the overall health of their system. The System Management Console can also be programmed to send out alert emails when certain defined application thresholds have been crossed. Sterling Commerce will be a party to the email alerts; however it is the responsibility of the customer to design the alerts and thresholds.

Some of the areas the customer can monitor include:

- The processing throughput, response time, the amount of pending work, and the number of errors generated at the API and agent level
- The status of the application servers
- The number of messages in JMS queues

In addition, the System Management Console allows the customer to:

- Shut down, suspend, or resume agent and integration servers.
- Clear reference data cache for a single or all cached tables.
- Enable/disable API, agents, user exits, services, and the application consoles application traces.

## 3.5 INTEGRATION/INTERFACE/DATA PROCESSES.

Each interface or communication point from Sterling Commerce applications to another customer system (i.e. customer's back-end ERP systems, partner systems, or data processes such as data loads and extracts).

Master Data updates and extracts should be changes to data only, the combined size is limited to 100MB size and should be sent no more than once per day.

## 3.6 A MAJOR PRODUCTION (OR STAGING) RELEASE IS:

A Major Production (or Staging) Release is either:

- 1) a first time release of a subscribed Application into the Staging/Production environment,
- 2) deploying fixes that are identified during the deployment process (as described in this User Guide),
- 3) a redeployment of a Major Staging Release into the Production environment
- 4) a major functionality change or upgrade to an existing Application

An upgrade can be defined in two unique parts, version or point releases to the base Sterling Foundations or Upgrades to customer extensions. Upgrades to Sterling Foundation may also include patches and/or hot fixes.

The release may include any of the following:

- Database schema changes
- On boarding of new partner/customers
- Application enhancements that change or enhance business logic
- Bulk data changes (i.e.: where the dev team makes changes to the application functionality that require DB schema changes and/or data changes to support the enhancement.)
- Integration point changes requiring infrastructure changes. i.e. Firewalls, Messaging, etc.

### 3.7 A MINOR PRODUCTION (OR STAGING) RELEASE IS

A Minor Production (or Staging) Release is either:

- 1) the deployment of patches, bug fixes or hot fixes of an existing Application into the Staging or Production environment,
- 2) a redeployment of a Minor Staging Release into the Production environment
- 3) minor functionality changes to an existing Application

The release may include any of the following:

- Severity 2, 3 & 4 bug fixes, corrections, i.e. typos, static page changes, static image changes, minor data changes (There is no limit on Severity 1 bug fixes)
- Support of ad hoc post-implementation requests, i.e. reports, mass data maintenance
- Implementation or modification of application server management queues
- Pre-Production environment cleansed data refreshes
- Resolving user-generated input problems

### 3.8 STERLING COMMERCE'S STANDARD WEEKLY MAINTENANCE WINDOW

Sterling Commerce's standard weekly maintenance window is currently from 8 PM – 11 PM PST Monday and Wednesday. This window is the Customer's opportunity to apply any Minor or Major releases to their Production environment. This window does not mean the application will be down or unavailable. If the customer has maintenance activities for their extensions, that maintenance activity must be performed during the Maintenance Windows. Sterling Commerce will notify the customer if the Application will not be available during the Maintenance Windows.

Sterling Commerce required maintenance activities take place during the above Maintenance Windows and also on Sundays between 2am and 3am PST

### 3.9 BACK UPS

Sterling Commerce backs up the customer's Production Data on a daily basis to both a near-line local disk store and to the corporate tape library for longer term off-site storage. Tape libraries are rotated

twice daily and moved off site daily to a secure storage facility. The near-line backups are available for small scale roll back events. Larger complete recoveries are taken from either on site tape libraries or offsite storage depending on the nature of the recovery process. Production servers and pre-production CVS (source code) is backed up onto near-line storage. The data store backup process is tested twice annually to verify the integrity of the stored data. Backups are tested using a recovery from tape process similar to a disaster recovery event. All backups are encrypted for security purposes.

### 3.10 DISASTER RECOVERY

Disaster recovery - Sterling Commerce Disaster Recovery Plan provides for recovery capabilities to a Tier 1 Disaster Recovery facility. Sterling Commerce will use commercially reasonable efforts to restore Customer's service (Recovery Time Objective) within 5 days and with a Recovery Point Objective of 24 hours. Sterling Commerce tests our Disaster Recovery Plan solution annually. Sterling Commerce offers an upgrade option to a 48 hour RTO for an additional fee.

### 3.11 DATA STORAGE ALLOCATION

The customer's Data storage allocation is for the Production Environment and includes disk space within a Storage Area Network (SAN) appliance (comprised of redundant fiber switches, dual SAN controllers, fiber channel disks, and dual system fiber HBAs, etc.). The customer must provide the scripts for Data purging and Data archival. Each pre-production environment (Development, Testing, and Staging) has a limitation of up to 50GB of storage.

### 3.12 SERVICE REQUESTS

A Service Request is when a customer requests that Sterling Commerce provides any information pertaining to files, or file settings, push files to non-production and production, logs, SQL statements, Agent Server restarts, JMS maintenance, system cron/scheduler changes, Java troubleshooting, integration point maintenance, Data updates or Data verification.

### 3.13 VPN:

Sterling Commerce will provide VPN Service with connection between the customer's data center and Sterling Commerce's Data Center. A VPN Service is a point to point connection which allows the customer the ability to connect securely to the Sterling Commerce's Data Center from their corporate network.

### 3.14 DATA REFRESHES:

Sterling Commerce will perform pre-production (Dev, Test and Staging) cleansed Data refresh from Production.

### 3.15 SHARED REPORTING DATABASE.

The shared reporting database is used to enable offline reporting from an extract of the transactional production data set. Production transactional data is extracted once every 24 hours. Customers have unrestricted access to their reporting data.

A shared reporting database is an optional item and is provided at an additional cost. Customers should note that the reporting database is in addition to the Cognos data mart which is supplied as part of the subscription.

### 3.16 SHARED FTP SERVICE.

The ability for the application to retrieve files from an external FTP source and allow for files to be transferred and stored locally at the Sterling Commerce data center.

### 3.17 SHARED & DEDICATED EMAIL SERVICE.

Email service is provided to allow outbound SMTP services to the Sterling Commerce applications. The customer may configure the application to utilize this shared resource in support of its business processes. System level email statuses and or alerts are included in the base fees and offering, however any requirement for mass emails such as marketing campaigns, etc requires an upgrade to a Dedicated Email service.

## 4 ROLES AND RESPONSIBILITIES:

### 4.1 SUGGESTED CUSTOMER ROLES

Sterling Commerce suggests that customers implement the following roles:

**Project Manager:** The customer's Project Manager will function as their main management contact and Sterling Commerce's main management contact for all Services related issues, and be the main escalation point for any issues not resolved by other participants. The customer's Project Manager will ensure that the customer team participants are meeting their functional obligations and that Sterling Commerce has timely access to all customer personnel and material as needed.

**QA Lead:** A QA Lead is responsible for managing the initial functional testing of the Services and for any customer specific extension implementations and changes. The QA Lead creates and maintains functional test scripts for the Application (s) that will be used to test every release. The QA Lead will manage the execution of the test scripts against the staging environment for all extension changes prior to go live, and for all changes to the Application (s) and extensions occurring after go live.

**Administrator:** The Administrator is responsible for managing, as appropriate, the customer's authorized internal and external users' profiles, login, password, etc.. The Administrator is

also responsible for managing all manual updates to customer business Data in the Application (s) via the administration screens.

**Technical Lead:** The Technical Lead is responsible for managing the performance and load testing of the Application(s) during the initial implementation phase and all ongoing Application changes. The Technical Lead creates, maintains and executes load test scripts for their Application that will be used to ensure that every release is acceptable from a performance standpoint. The Technical Lead is the customer's subject matter expert about technical operations and infrastructure.

**Data Security Administrator:** The Data Security Administrator is responsible for ensuring that all customer data security and handling procedures and policy requirements are met.

## 4.2 STERLING COMMERCE'S RESOURCES:

Sterling Commerce has implemented the following roles to support the customer's use of and access to the Product.

**Client Manager:** Prior to go live, the Client Manager is responsible for assisting the customer in defining any of their infrastructure requirements for accessing the Services. Once the Application is available in the Production environment, the Client Manager is responsible for proactive oversight of the application and business processes. The Client Manager will be the customer's advocate within Sterling Commerce. The Client Manager will regularly meet with assigned customers to review the Product performance and any outstanding issue resolutions. The Client Manager coordinates the Maintenance Window Activities with customers.

**Applications Manager:** The Applications Manager is responsible for overall Release Management, performance engineering and quality assurance of the Services Environment, including 2nd level support, assistance with solving complex technical issues affecting the customer's technical resources, and log bugs. The Application Manager will also maintain staged copies of the customer's environments and assist with reproducing customer problems within the Staging environment. The Applications Manager is responsible for the following activities:

- Data load and integration points with vendors, dealers, customer backend systems or other partners
- Manages the application Change Management process
- Accepts initial builds from the application development team and deploys continuing engineering builds and war/ear file promotions to be moved into Staging and Production
- Management of the customer's extension versioning system repository
- Support of preliminary testing of the Application during deployments
- Verifies that the customer has performed the required testing of builds prior to acceptance, including functional, load and performance testing. The Applications Manager reviews the customer's testing methodology and scope to ascertain that

testing has occurred and that appropriate customer designees have approved the results.

- Task and case management through case tracking tools
- 7 x 24 response to alerts concerning the Infrastructure availability
- Applies Application patches and bug fixes as required
- Coordinates Services recovery in conjunction with other technical resources.
- Owns the customer's specific disaster recovery and business continuity plans and test procedures, if applicable.

## 5 DEPLOYMENT PROCEDURES

### 5.1 NOTICE

The customer is responsible for determining when the subscribed applications are to be upgraded to the next release. However, the customer should keep in mind that only supported releases of the Application are made available by Sterling Commerce. Therefore, the customer must notify the Client Manager of any pending deployment of either the next release of the Application or extensions. All deployment requests are governed by the following:

#### **Deployment to Staging Environment**

2 business days notice for Minor Releases

2 weeks notice for Major Releases

#### **Deployment to Production Environment**

2 business day notice for Minor Releases

2 weeks notice for Major Releases

### 5.2 DOCUMENTATION AND PROCESS STEPS

As part of the deployment process, the customer will be asked to provide the following to Sterling Commerce, within the deployment notice period:

Artifacts/Documents Required:

- Deployment files including war/ear files jar files, CDT xml, etc.
- Release notes – list of enhancements and defect fixes.
- Detailed test plan, which will include:

- Scope Statement
- Execution Timeline
- Result/Recording Method(s)
- Environment and Data Requirement
- Smoke Tests
- Use Cases
- Test Scripts
- Performance and Stress Test (PST)
- Master release-to-production deployment document (describes, in detail, the exact steps Sterling Commerce will follow to deploy a Major Release):
  - Contact information
  - Timelines/Schedules
  - Data Migration Plan
  - Detailed Deployment Steps
  - Platform Requirements
  - Prerequisite steps
  - Validation Plan
  - Rollback plan

### 5.3 DEPLOYMENT SCHEDULING

Sterling Commerce will schedule the deployment of these releases and customer specific extensions to the Environments specified by the customer. The customer or their designee may perform the actual deployment to the Development and Test Environments. Sterling Commerce will perform the actual deployment to the Staging and Production Environments.

### 5.4 PERFORMANCE TESTING

Prior to any Major release, the customer is responsible for the development, creation and execution of performance tests to validate the capability of customer extensions and the corresponding impact to the Services, Services Environment and Application. Sterling Commerce reserves the right to reject any code promotion that adversely affects the Production Environment. Customer is also responsible for performing any re-tests of previously rejected deployments.

Sterling Commerce will monitor CPUs, memory, disk utilization and network traffic during the execution of the initial customer Performance Test. If additional retesting is required, or if Customer requires additional assistance from Sterling Commerce for a successful deployment, this effort will be billable on a T & M basis.

## 6 SEVERITY LEVEL GUIDELINES

Severity levels provide an indication of the urgency of an issue, and help Sterling Commerce provide a rapid and effective response. Categorizing severity levels incorrectly hinders the overall case-handling process, and can adversely affect all customers. When the customer reports an issue this will be discussed with Sterling Commerce and an appropriate severity level will be agreed upon. The customer will have the option to change the severity level of an issue.

Response goals are intended to provide a target for initial response to an issue or query. Sterling Commerce will work a Severity 1 issue around the clock until a resolution or workaround is in place, or the severity is downgraded, provided the customer has a technical resource available to work with us. Please note that the response goals are different for the Production and Pre-Production (Development, QA and Staging) Environments. The response goals for the Production Environment are higher due to the effect Production Environment issues have on customer business activity.

We respond to problem reports based on the following guidelines:



**Production Environment:**

<b>Severity</b>	<b>Description</b>	<b>Response Time Goal</b>
<b>1 - High</b>	<ul style="list-style-type: none"> <li>• System unavailable</li> <li>• Hardware or system failure</li> <li>• Customer (or the Named Users) can't do business</li> <li>• Implementation timeline is severely impacted</li> </ul>	<ul style="list-style-type: none"> <li>• Response within 30 minutes</li> <li>• Immediate and constant attention until resolved or reassigned a lower priority</li> <li>• Action and communication plans created</li> <li>• Progress review by customer and Sterling Commerce</li> </ul>
<b>2 - Medium</b>	<ul style="list-style-type: none"> <li>• Customer can't access administration screens</li> <li>• System available, some functionality is affected</li> <li>• Available workaround not acceptable</li> </ul>	<ul style="list-style-type: none"> <li>• Response within 2 business hours</li> <li>• Priority focus from customer case owner and Sterling Commerce</li> <li>• Frequent contact by mutual agreement</li> <li>• Progress review by customer and Sterling Commerce</li> <li>• Ongoing attention until resolved or reassigned a lower priority</li> </ul>
<b>3 - Low Non-Critical</b>	<ul style="list-style-type: none"> <li>• Non-system impacted questions and incidents</li> <li>• Requests for service (log file retrieval, Database queries)</li> </ul>	<ul style="list-style-type: none"> <li>• Response by next business day</li> <li>• Resolution coordinated within Sterling Commerce</li> <li>• Progress review by customer and Sterling Commerce</li> </ul>
<b>4 - Minor Issue or Questions</b>	<ul style="list-style-type: none"> <li>• General Questions</li> <li>• Operational Questions</li> </ul>	<ul style="list-style-type: none"> <li>• Response by next business day</li> <li>• Resolution coordinated within Sterling Commerce</li> <li>• Progress review by customer and Sterling Commerce</li> </ul>

**Pre-Production Environment (Development, Test, and Staging):**

Severity	Description	Response Time Goal
<p><b>2 - Medium</b></p>	<ul style="list-style-type: none"> <li>• Pre-Production systems unavailable (Development, QA, or Staging environments)</li> <li>• Hardware or system failure</li> <li>• Customer cannot access systems</li> <li>• Implementation/release timeline is severely impacted</li> </ul>	<ul style="list-style-type: none"> <li>• Response within 4 business hours</li> <li>• Assist in evaluating the condition. If the condition is found to be in the pre-release of the subscribed Application, problem resolution is the responsibility of the development team</li> <li>• Ongoing attention until resolved or reassigned a lower priority</li> <li>• Action and communication plans created</li> <li>• Progress review by customer and Sterling Commerce</li> <li>• Accelerated response times apply during UAT against Staging Environment</li> </ul>
<p><b>3 and 4 - Low</b></p>	<ul style="list-style-type: none"> <li>• Customer development team requests administrative changes, i.e. Data refreshes, add new users, etc.</li> <li>• Minimal functionality affected</li> </ul>	<ul style="list-style-type: none"> <li>• Response by next business day</li> <li>• Resolution coordinated within Sterling Commerce</li> <li>• Progress review by customer and Sterling Commerce</li> </ul>

Sterling Commerce’s Standard Business Hours are 5 AM to 6 PM Pacific Standard Time Monday through Friday (excluding Sterling Commerce’s holidays). Response times for Severity 1 issues for the Production Environment are managed on a 24 x 7 basis. Response times listed for all other severity levels are managed within Sterling Commerce’s Standard Business Hours.

## 7 ROOT CAUSE ANALYSIS PROCEDURES

The Root Cause Analysis (RCA) process is driven through Sterling Commerce's case management system.. RCAs are created for all Severity 1 and 2 cases. RCAs are not created for Severity 3 and 4 cases. Depending on the nature of the issue (see below), RCAs may take a few hours to a few days to create.

There are three areas in which an RCA may be required:

- Infrastructure issues - server hardware, network equipment, SAN, etc.
- Out of the Box (OOTB) Application code issues - issues with the core code ("Out of the Box" means Sterling Commerce's then-current release of the Subscribed Application , not including any changes in business rules or parameters implemented by the customer (or customer's designee) using the Application's user exits.)
- Application /Infrastructure issues - application servers, databases, web servers

RCA's will not be created (despite the Severity priority) for issues with customer specific extensions. The Customer is responsible for resolving any issues with these extensions.

## 8 EXCLUDED SERVICES

Unless contracted under 9 below the following services are not included within the subscription pricing for the Sterling As A Service Premium offerings:

- Creation of customer specific extensions, enhancement, or other development work .
- Project Management and development work associated with any upgrades or application of patches, etc.
- Support of customer specific extensions.
- Functional, UAT, Performance and Production validation/acceptance testing relating to new releases, upgrades, patches, or bug fixes
- Relationship management of any of customer clients, suppliers or partners
- First line support for users or other customer employees, contractors, suppliers or partners.
- Management of user profiles, passwords, etc.
- Manual changes to business Data residing in application
- Development, management, customer specific extensions to, or testing of reports
- Planning and development of scripts for Data purging and/or archival of Data

## 9 ADDITIONAL SERVICES AVAILABLE UNDER A STATEMENT OF WORK:

The following services are available at additional cost under a Statement of Work which will be based upon the customer's detailed requirements:

### 9.1 ONBOARDING AND IMPLEMENTATION SERVICES

Details of the Onboarding and Implementation Services can be found here on the Sterling Commerce Web Site:

<http://www-01.ibm.com/software/commerce/sterling-commerce/>

### 9.2 APPLICATION SYSTEM IMPROVEMENT SERVICES:

Sterling Commerce offers ongoing application system improvement services, performed by experienced Sterling Commerce professional services consultants, to manage ongoing enhancement requests and provide support for customer specific extensions. With our application improvement service, you have a cost effective way to enrich your solution after initial deployment by working side-by-side with your IT organization. You can benefit from specialized skills without having to hire specialized talent.

Further details of the System Improvement Services can be found here on the Sterling Commerce Web Site:

<http://www-01.ibm.com/software/commerce/sterling-commerce/>

### 9.3 PRODUCT TRAINING

Details of Sterling Commerce product training can be found here at the Education web site:

<http://www-304.ibm.com/jct03001c/services/learning/ites.wss/zz/en?pageType=page&c=Z380210I22756D57>

### 9.4 CAPACITY PLANNING ASSESSMENT

Sterling Commerce recommends that our customers perform a full Capacity Planning Analysis at least once a year or in conjunction with any major release that could change the resource requirements. This service includes modeling of future capacity requirements via our standard sizing calculator as well as load and performance testing in the Staging environment. Sterling Commerce will work with the customer to determine future

requirements, analyze current system behavior patterns and perform appropriate tests. Sterling Commerce will then analyze the results, make recommendations for areas of improvement and necessary increases in resources, and present the findings to the customer project team.

## 9.5 COMPLIANCE CERTIFICATION EXERCISE

Support for customer-requested compliance exercises such as SOX, PCI, and CISP are offered as billable services and are charged on a time and materials basis. The governing bodies for these certifications require that each customer implementation be individually validated for compliancy based on each customer's unique business processes and policies. Sterling Commerce can provide support for our customer's certification efforts to ensure that their specific implementation meets the appropriate standards.

## 9.6 TRANSITION SERVICES

Sterling Commerce's Order Management as a Service Premium, Catalogue and Offer Management as a Service Premium and Configure Price Quote as a Service Premium Customers have the option to transition the project to either their in-house data center or a 3rd Party data center of their choosing. If the standard End of Contract Data Procedures outlined below are not sufficient for the Customer's requirements, Customer has the option to engage Sterling Commerce's Transition Services. Once we have been notified of the intent to transition the customer's project to a new data center, with a 120 day advance notice, we engage in a Transition Assessment. The Transition Assessment is a fee-based engagement in which Sterling Commerce will create a project plan for the migration of the Sterling Commerce application and assist as requested in best practices recommendations around infrastructure and processes. Deliverables include:

**Transition Plan:** A formal transition plan including processes for de-commissioning the Sterling Commerce Hosting environments, delivery of the Sterling Commerce application to the customer for deployment in the new data center, and support of customer's testing prior to final application and user migration.

**Data Migration Plan:** The data migration plan focuses on details around encrypting and transferring or disposing of the Customer's data. Data files may include database dump, log files, and current deployment files delivered in a manner and format based on volume of data, security requirements, etc.

In order to transition customers should note that their subscription license will need conversion to a perpetual license and this too would be at an additional cost.

## 9.7 ADDITIONAL PROJECT INSTANCE FOR PRE-PRODUCTION (DEVELOPMENT AND TEST ENVIRONMENTS).

A pre-production instance is a workspace that provides an environment to support a single project, a project in turn is defined as a single application/or code set generated by the project SDK. The instance/project environment consists of these elements, a single virtual Apache web configuration, a single application environment to support the one project instance; this will include disk space to support the deployed application, also included is a single database schema to support the project instance and project data.

## 10 CHANGE CONTROL PROCESS:

This process defines how Sterling Commerce will alert customers if a change is planned for any of the infrastructure components. Those components would include:

### 10.1 INFRASTRUCTURE CHANGES:

Sterling Commerce follows a strict process when making changes in production. We notify affected customers via e-mail when we are planning infrastructure changes. We have a standard e-mail format that targets pre-defined operations groups within each customer. The customer's team will only be notified when the customer's application will be affected by the planned change. All production changes will be implemented in the Standard Maintenance Window. We also require that all changes go through staging verification process and then clear (CCB) the Sterling Change Control Board prior to production implementation. E-mails are also sent upon completion of changes to request the customer to execute a verification process.

Our typical change types include:

- Low impact – Application may be impacted and a rolling restart may be required.
- Medium impact – Application outage and affects only 1 or 2 customers
- High Impact – Application outage affecting all customers
- Emergency – Application is down and this change must be implemented immediately for fix
- Critical – Application is not down, but change is required immediately

Items Typically Controlled By CCB:

- Database Patches
- Operating Systems patches
- BIOS patches

- Firmware upgrades to any server, SAN, switches, firewall, load balancers, etc...
- SAN expansion plans
- Failover component testing

## 10.2 APPLICATION CHANGES:

Application related changes are generally driven by each customer. Therefore, it is each customer's responsibility to document and maintain all change records for their application, however if a Customer doesn't have a formal change control process then Sterling Commerce will assist in the creation of a practice as well as allowing the customer access to Sterling Commerce's case management system for change related event tracking.

## 11 END OF CONTRACT DATA PROCEDURES

At the end of the Subscription Term, Sterling Commerce will, at no additional charge and upon the customer's written request, delete archived data after providing the customer an opportunity to obtain applicable data accumulated as a result of the Hosted Services so long as the customer has paid all undisputed invoices issued under the Contract.

At least 90 days prior to the end of the Subscription Term (or within 90 days notice of termination of the Subscription Term), Sterling Commerce will coordinate a formal termination plan with the customer to include processes for de-commissioning Hosted Services environments, applications, and user access; data transfer, retention or disposal; identification of migration and/or support services; and final invoicing. Data files may include a database dump (database dumps are limited to materials, inventories, and/or order transactions (but not Personally Identifiable Information or financial transactions), message queues or status information, and integration information. Data will be delivered in a manner and format mutually agreed upon by Sterling Commerce and the customer, based on volume of data, security requirements, and expected usage. Any effort or expenses incurred by Sterling Commerce to support termination of a customer's Hosted Services Environment to a non-Sterling Commerce data center beyond what is outlined above will be billed to Customer at standard Sterling Commerce T&M rates.