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Caplin Xaqua 1.0

Production-Ready Checklist

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CONFIDENTIAL

1 Preface

1.1 What this document contains

This document describes a detailed checklist which you should follow to make your system ready for production. It should be read **after** the *Best Practices for Deploying Caplin Xaqua* document, which contains recommendations about how to deploy your system in a live environment.

1.2 Who should read this document

This document is intended for anyone who is planning to deploy Caplin Xaqua in a live environment.

2 Checklist

To make your system production-ready, follow the steps outlined in the checklist below.

☑ Do some background reading

Read Best Practices For Deploying Caplin Xaqua, which is available to download from the Caplin Client Portal at: https://support.caplin.com/documentation/documentationhome.data/CX_DeploymentBestPractice_10.pdf

☑ Check your architecture

You should deploy failover DataSource and Liberator (https) mechanisms in order to minimise disruption in the event of unforeseen incidents.

☑ Use the latest product versions

Ensure that you are using the latest versions of Caplin products. Later releases will include bug fixes as well as new features: refer to the Release Notes for each product version for detailed information.

☑ Check your testing procedures

Your UAT environment should mirror the live production environment. Ideally, all unforeseen incidents will be captured before you go live.

☑ Know your system limits

To help meet functional and performance requirements, you should ensure that the following have been completed:

- End-to-end testing against the production figures (updates, users etc);
- End-to-end performance testing;
- A comparison of the proposed production system against the project production usage. This should include network utilisation, CPU, JVM and memory usage profiles: it will also help with capacity planning.

☑ Manage your logs

In a production environment, we recommend that you store logs for the past seven days (including packet logs), where disk space allows. Stored logs should be rotated on a daily basis at the INFO logging level. The Liberator and Transformer packet logs can be very large: each log size should therefore be limited to 15-30 minutes.

The following example shows how to store packet logs for seven days, each log covering a 15 minute period:

```
add-log
    name    packet_log
    period    15
    suffix %u%H%M
end-log
Where:
%u: with values from 1 to 7, representing Monday to Sunday.
%H: hour
%M: minute
```

You should ensure that there are no configuration or error messages returned at start-up, such as:

2011/08/08-15:32:48.406 +0100: CONFIG: etc/rttpd.conf:7 Option debug-level is deprecated: Use log-level

And finally, you should confirm with your operations team that incident capture procedures and delivery are in place, as these will be important when investigating incidents.

☑ Monitor alerts

You should set alerts so that you are notified when specific events occur, for example:

- When disk space utilisation reaches certain levels;
- Process monitoring you may want to use an external tool, such as Zenos, to do this;
- Use the Caplin Xaqua Monitoring Console to monitor and dynamically enable server-side RTTP logging for incident investigation.

Document your environment

Create a document detailing your production environment: this will help us to work with you to troubleshoot unforeseen incidents. Your document should contain network diagrams (including firewalls, switches etc) and diagrams detailing the sequence of your data flow.

☑ Share your information

We will work with you to resolve any issues that arise during deployment. To enable us to do so, you should make all relevant documents available on the shared confluence space at (http://confluence.caplin.com). This will act as the central shared document repository for the project, and as a central storage area for schedules, calendars etc. It also provides a useful way to transfer and share files. The space is editable by everyone who is assigned to the project.

2.1 Liberator

☑ Production License keys

You should request Production License keys from Caplin Support at support@caplin.com, and download them through the Caplin Client Portal at https://support.caplin.com.

☑ DataSource heartbeats

When the Liberator does not receive heartbeats from the DataSources it will attempt to reconnect to the DataSource after a set period. This can be configured in the rttpd.conf file as follows:

add-peer	
remote-id	1
remote-name	ExampleDataSource
label	ExampleDataSource
heartbeat-time	15
heartbeat-slack-time	5
end-peer	

Where heartbeat-time refers to the heartbeat interval time (in seconds), and heartbeat-slacktime refers to the amount of time the Liberator will wait if the heartbeat has not been received before attempting to connect to the DataSource again.

☑ Concurrent users

When the licensing limits are reached, earlier sessions will be removed to allow the user to login. This can be turned on or off via the auth-eject-users configuration option in rttpd.conf, and should be set if max-logins-per-user is defined in the license key.

☑ Optimisations

You should ensure that the https Liberator has been optimised. Refer to the sections "Optimising efficiency" and "Running Liberators with many users" in the *Liberator Administration Guide*.

☑ Deployment file structure

The standard installation procedure should be used when deploying the Liberator (see the "Getting Started" section in the *Liberator Administration Guide*). This procedure enables you to install the Liberator in such a way that changes can easily be made in the future.

☑ Liberator directory password

The Liberator htdocs directories use HTTP authentication realms. The user credentials should be changed from the following default values:

add-authdir name realm username password end-authdir

/status Liberator Admin admin admin

☑ Liberator status page

This is an example only, and must be changed before the Liberator status page can be integrated to run within your SSO solution.

☑ Minimised htdocs

A client can browse through the available Liberator directories. The development example and documentation directories should be removed before going into production.

Note that the rtml/* rtsl/* and sl4b/* files must **not** be removed from the Liberator htdocs directory.

☑ JMX Monitoring

We recommend that you set the Java heap size for JMX usage in Java.conf as $\tt jvm-options$ - <code>Xms256m -Xmx256m</code>.

2.2 KeyMaster

KeyMaster has been designed to be easily tested. However, in its default state KeyMaster is not secure, and should therefore not be used in production without implementing further changes.

Refer to the "Making KeyMaster production ready" section in the *KeyMaster Administration Guide* for more information:

https://support.caplin.com/documentation/documentationhome.data/KeyMaster_44_AdminGuide.pdf

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