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EPIC ClearView Synchronization Service Requirements

APPROVALS:

| Name | Job Title | Signature | Date |
|---------------|--|--|---------|
| Scott Pletzer | Director of Quality & Program Management |  | 28JUN12 |
| Andrew Mason | Chief Technology Officer |  | 6/28/12 |

REVISION HISTORY

| Revision | Revision Date | Reason for Revision/Change Request | Revised By |
|----------|---------------|------------------------------------|------------|
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EPIC ClearView Synchronization Service Requirements

1.0 Purpose

The purpose of this document is to define the interaction between ClearView, the Synchronization service that run as a Windows service, and the EPIC Central web-services.

2.0 Scope

The scope consists of the EPIC Central system as a whole, no other systems requirements are defined in this document. The initial release of this document addresses only the requirements for the core system; this will be augmented as new requirements are introduced.

3.0 Definitions

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| Webservice | A web service is typically an application programming interface (API) or Web API that is accessed via Hypertext Transfer Protocol (HTTP) and executed on a remote system, hosting the requested service. |
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4.0 System Requirements

- 4.1 A queuing application shall be written that will run as a standalone windows service.
- 4.2 The queuing service should produce a log of all activity that contains the time and date of the activity as well as the text that describes the activity.
- 4.3 The service should start when Windows starts and shall appear in the list of windows services.
- 4.4 The windows service must have a debug console that can be instantiated.
 - 4.4.1 The console must be protected with a User Id and password.
 - 4.4.2 The console must show the transactions as they are being issued as well as the responses.
 - 4.4.3 The console must be able to show the log that was created by the service.
 - 4.4.4 Historical counts (count of calls made, by date) All calls (functions) should be tracked.
- 4.5 The debug console shall be able to be started and stopped without requiring a reset of the service.
- 4.6 The console must show a real-time count of the number of items in the queue by item type.



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- 4.7 Requests shall function in real-time, if a response cannot be received in a prescribed amount of time, the request will be placed into a queue where it will be handled asynchronously.
- 4.8 Responses will contain a status reflecting the success or failure of the call, the status values at a minimum will be:
 - 4.8.1 Ok {the request was made and a response was returned from the server}.
 - 4.8.2 No Queue Service {the queue service could not be reached}.
 - 4.8.3 No Web Service {the queue service was able to be reached, but the EPIC Central web service could not}.
- 4.9 Items in the queue must be retried on a defined frequency until they are properly processed. This frequency should be an adjustable parameter.
- 4.10 The queue must persist to non-volatile storage as to maintain state in the case of a shutdown of the machine.
- 4.11 Resources used must be localized to allow support of different cultures.
- 4.12 The communication between the synchronizations service and the ClearView application must be through http.
- 4.13 All adjustable parameters should be able to be modified from an interface tied to the queuing service.
- 4.14 Service must keep track of no connectivity time.
- 4.15 Service should ping EPIC central regardless of whether or not ClearView is running.
- 4.16 The service will manage the credentials necessary to connect to the EPIC central service.
- 4.17 The queuing service must expose all of the web service function calls that are available from EPIC Central.