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## Version 9.0



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Version 9.0

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# **Table of Contents**

Who Should Read This BookvConventions Used in This BookvThe eLoyalty LibraryviChapter 1. Purpose1Chapter 2. Modules3icIntellect Schema Architecture3icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25An Advanced Scheduler Example26	About This Document	v
The eLoyalty LibraryviChapter 1. Purpose1Chapter 2. Modules3icIntellect Schema Architecture3icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Who Should Read This Book	v
Chapter 1. Purpose1Chapter 2. Modules3icIntellect Schema Architecture3icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute13Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Conventions Used in This Book	v
Chapter 2. Modules3icIntellect Schema Architecture3icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	The eLoyalty Library	vi
icIntellect Schema Architecture3icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Chapter 1. Purpose	1
icIntellect_CTG Schema Architecture4icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Chapter 2. Modules	3
icIntellect_ICM Schema Architecture6Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	icIntellect Schema Architecture	3
Chapter 3. Database Access11Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	icIntellect_CTG Schema Architecture	4
Required Logins11Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	icIntellect_ICM Schema Architecture	6
Additional Logins for icIntellect12Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Chapter 3. Database Access	11
Additional Logins for icApplications Server and icRoute12Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Required Logins	
Chapter 4. Database Objects Naming Standards13Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Additional Logins for icIntellect	
Chapter 5. Data Retention15Data Retention Policies Over One Year16Data Retention Policies Over Three Years18Data Retention Over Five Years20Chapter 6. Advanced Job Scheduler23Implement the Advanced Scheduler Process25	Additional Logins for icApplications Server and icRoute	
Data Retention Policies Over One Year       16         Data Retention Policies Over Three Years       18         Data Retention Over Five Years       20         Chapter 6. Advanced Job Scheduler       23         Implement the Advanced Scheduler Process       25	Chapter 4. Database Objects Naming Standards	
Data Retention Policies Over Three Years       18         Data Retention Over Five Years       20         Chapter 6. Advanced Job Scheduler       23         Implement the Advanced Scheduler Process       25	Chapter 5. Data Retention	
Data Retention Over Five Years    20      Chapter 6. Advanced Job Scheduler    23      Implement the Advanced Scheduler Process    25	Data Retention Policies Over One Year	16
Chapter 6. Advanced Job Scheduler       23         Implement the Advanced Scheduler Process       25	Data Retention Policies Over Three Years	
Implement the Advanced Scheduler Process	Data Retention Over Five Years	20
	Chapter 6. Advanced Job Scheduler	
An Advanced Scheduler Example	Implement the Advanced Scheduler Process	25
	An Advanced Scheduler Example	26

#### icIntellect: Design

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Example 1	27
Example 2	27
Dealing with Precedence	
Chapter 7. Error Reporting	
Chapter 8. Database Maintenance	33
Chapter 9. Reporting	
Microsoft SQL Server Reporting Services (SSRS)	35
Collections	35
Browser Standards	
Chapter 10. Multi Language	41
Data Structure Design	41
Report Data Sets	44
Report Parameters	44
Lookup Function	45
Chapter 11. Profile Management	47
Save Profile	47
Rename or Delete a Profile	48
To Rename a Profile	49
To Delete a Profile	
Appendix A. Trademarks	

## **About This Document**

The icIntellect Reporting Services provide your Command Center and Leadership teams with an optimal mix of high and low level performance metrics, housed in a single location. The overall architecture goal is to provide a highly available and scalable access to reporting to provide management with decision support.

### Who Should Read This Book

This document is intended for anyone who intends to create one or more new reports, either for the icIntellect product or to address a specific customer need for one or more custom-built reports. In addition, the information contained herein also applies to anyone who performs updates to existing reports, either within the icIntellect product or to update a customer-specific report.

#### **Conventions Used in This Book**

The following conventions are used in this book:

- Plain text Window titles, names of toolbar button clusters, and names of tabs. These items are included exactly as they appear in the interface.
- Monospace Names of files, names of directories.
- **Bold** Column labels, box or field labels, buttons, menu items, commands, note labels, and names of keyboard keys. These items are included exactly as they appear in the interface or on the keyboard.
- *Italics* Document titles, variables, and emphasis for importance (for example, *Object\_Name*).

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### The eLoyalty Library

This section presents a list of all internal documents that are related to this internal document. This includes documentation for other related products as they come into existence or related documentation that currently exists. This section will be updated periodically to reflect all documentation that is available currently.

INCM-9110-01	icCallMeInstallation Guide	Provides information about installing the icCallMe product.
INIT-9101-01	icIntellect Installation Guide	Provides information about installing the icIntellect product.
IN00-9130-01	System Requirements for Appli- cation Installation	Provides system requirements for a variety of eLoyalty products that must be met before a product installation.

## **Chapter 1. Purpose**

This document is intended to outline the design of the icIntellect product schema and provide an overview of how it works.

The main purpose is to:

- 1. Provide the link between the icApplications Portal and icIntellect.
- 2. Individual module specific information on design.
- 3. Reporting structure.

See the following graphical representation of the purpose.



#### **High Level Overview** icApplication Portal The icApplications Portal is an application that is designed to make it easier to create, maintain, or remove objects that are used by other eLoyalty applications. The icApplications Portal provides two key functions for icIntellect and Reporting Services: 1. Security - A user has to have a login created in icApplications in order to permissions to login on icintellect Report Viewer. 2. Access - The Portal provides data collection permissions Skill Groups, Call Types, Agent Teams, Location, and Reports Reporting icIntellect Data Warehouse icintellect is a data warehouse that contains data from the SQL Server Reporting Services (SSRS) is a server-Cisco Unified Intelligent Contact Management ( ICM) and based report generation software system from Microsoft. the Cisco Unified Communications Manager (UCM) Administered via a web interface, it can be used to prepare and deliver a variety of interactive and printed icintellect collects this information in detail and summary groups for different date intervals and also converts the UTC reports. time zone to multiple time zones selected by the client. This Reporting Services received access information from information is used for reporting purposes. icApplication Portal icApplications provide access information related to permissions for data objects and collections. icIntellect™ **Reports Server** SOL Server Cisco Unified Intelligence Center icIntellect" Data Mart ICM ICM Call Web, Chat, WFM, Detail Corporate, & 3rd Cisco CVP Cisco UCM Records Party Elements Cisco UCCE

## **Chapter 2. Modules**

icIntellect is broken into the following main modules:

- 1. icIntellect
- 2. icIntellect\_ICM
- 3. icIntellect\_CTG (includes icIntellect\_CTG\_Main)

This chapter includes the following topics:

- "icIntellect Schema Architecture" on page 3.
- "icIntellect\_CTG Schema Architecture" on page 4.
- "icIntellect\_ICM Schema Architecture" on page 6.

#### icIntellect Schema Architecture

Important: This module is required by all other modules.

The icIntellect module provides the parameter filter level layer for ICM (Contact Center Reports) and CTG (Cradle-to-Grave) reports and IVR (Interactive Voice Recognition) reports. The configuration tables provide information for data filtering:

- 1. Contains all system configuration tables specific to tenants and reporting.
- 2. Performs all maintenance tasks for database backups, for all databases, on server.
- 3. Provides tenant security level filtering for data collections utilized in reporting by connecting to the icApplications Portal.
- 4. Provides logic for management reporting objects (for example: icIntellect Report Viewer, Profile Management, and loading client-specific reports into the Portal).

The data for the configuration tables is populated by data files, Profile Management function, or icApplications Portal data feeds.

See the following table for information about the reports that can be generated by this module:

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Report Report Name Type		Purpose		
Report Viewer Management		This is the icIntellect Viewer that users access to run all reports. The viewer page provides a list of report collections. Reports can belong to several collections. When you click on a report in a collection to run that report, when you have finished and click on the <b>Home</b> button, you are returned to the collection from which you initiated the report.		
Management Tool Management		Allows a user to delete or rename a profile.		
Create New Profile Menu Management		Allows users to create a profile of a report which saves the selected filters.		
Override User ID Management		Allows a user to run a report that uses an alias of another user's ID for a specific period of time.		

The following table lists the database objects.

# Coming!!

### icIntellect\_CTG Schema Architecture

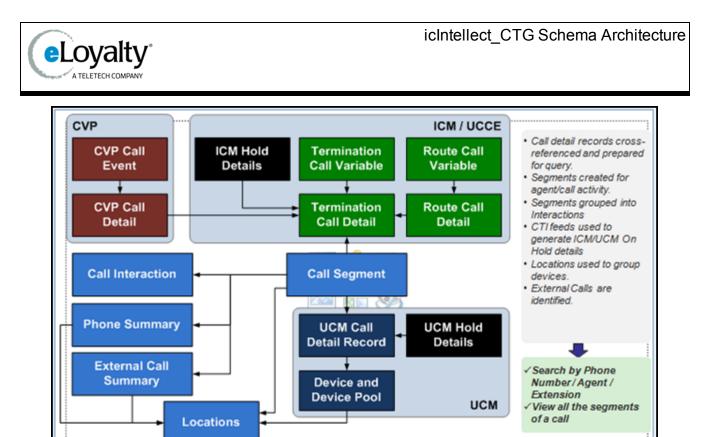
**Important:** This module has the ability to be a stand-alone with icIntellect.

Cradle-to-Grave (CTG) provides all detail records (CDRs) generated by the Cisco Unified Communications Manager System. The Cisco Communication Manager publishes CDR data and uses SFTP to send this data every 60 seconds to the icIntellect\_UCM1 folder, located on a designated network drive. This server is configured with a Windows command file that runs every so often to pick up all of the CDR files that were sent by SFTP, moves them into a backup folder, and then deletes the files on the server.

The data is loaded into Detail and Summary tables for reporting purposes by utilizing the icIntellect Job Scheduler that executes several stored procedures to import data from UCM:

- Into Detail records.
- Create summary records by time Zone and interval.

The data model is illustrated in the following diagram:



See the following table for information about the reports that can be generated by this module:

Report Name	Report Type	Purpose	
External Call By Country Report	Historical Summary	Provides a count of calls placed to each country for specific locations and timeframes.	
External Call By Number Report	Historical Summary	Provides a summary of the calls placed to or received from specific phone numbers over a specified period of time.	
External Call Detail Report	Historical Detail	Provides a list of the calls placed to or received from a specific set of phone numbers over a specified period of time.	
External Call Most Active Report	Historical Summary	Provides a summary of the most active phone numbers for the specified period of time and direction (for example: inbound, outbound, dialer, or internal).	
Interaction Detail Report	Historical Detail	Provides a cradle-to-grave view of a customer interaction including IVR, phone number, and agent segments.	
Interaction Search Report	Historical Detail	Provides the ability to search the cradle-to-grave data-mart for interactions that meet a specified criteria and that can include: phone number, agent, segment filters (for example: SL metrics), interaction filters (for example: number of segments), call direction, and time range.	

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Report Name	Report Type	Purpose	
Phone By Number Report	Historical Summary	Provides a summary of the calls for a specific phone number over a specified period of time.	
Phone Detail Report	Historical Detail	Provides a list of the calls placed to or received from a specific set of phone numbers over a specified period of time.	
Phone Summary Report	Historical Summary	Provides a summary of the calls for a specific location over a specified period of time by interval.	

### icIntellect\_ICM Schema Architecture

**Note:** The purpose of this module is to interpret data in the Cisco Contact Center environment. Resource reports include how individual agents, agent team, and skill groups perform.

Center reports include how a contact center, IVR application, or division is performing. It also provides information on the customer experience. These reports are primarily based on Call Type data and call detail records.

The data is loaded into Detail and Summary tables for reporting purposes by utilizing the icIntellect Job Scheduler that executes several stored procedures to import data from HDS:

- Into Detail records.
- Create summary records by time Zone and interval.

Data is accessed through a link server to the HDS database. A series of stored procedures summarize data based on interval and time zone.

See the following table for information about the reports that can be generated by this mod	dule:
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Report Name	Report Type	Purpose	
Agent Configuration Report	Configuration	Provides listing of agent configuration details, team, supervisor, skill groups.	
Agent Historical Report	Historical Summary	Provides agent performance metrics for individual agents.	



Report Name	Report Type	Purpose	
Agent Not Ready Detail Report	Historical Summary	Report of Agent Not Ready Codes for each logon instance.	
Agent Real Time Report	Real-time	Provides complete set of agent real-time metrics for the selected agent set.	
Agent Skill Group Historical Report	Historical Summary	Provides agent performance metrics for individual agents broken down by skill group.	
Agent Skill Group Real Time Report	Real-time	Provides complete set of agent and skill group real-time metrics for the selected agent team set.	
Agent Team Configuration Report	Configuration	Provides listing of agent team configuration details including supervisors and agents - with respect to the time frame requested.	
Agent Team Detail Historical Report	Historical Summary	Provides agent team performance metrics broken down for individual agents.	
Agent Team Detail Skill Group Historical Report	Historical Summary	Provides agent team performance metrics broken down for individual agents by skill group.	
Agent Team Historical Report	Historical Summary	Provides agent team performance metrics summarized by team. Used to compare the performance of different teams.	
Agent Team Not Ready Detail Report	Historical Summary	Report of Agent Team Not Ready Codes for each logon instance.	
Agent Team Skill Group Historical Report	Historical Summary	Provides agent team performance metrics summarized by team. Used to compare the performance of different teams.	
Agent Team Configuration Report	Configuration	Provides listing of agent team configuration details including supervisors and agents - with respect to the time frame requested.	

icIntellect: Design

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Report Name	Report Type	Purpose	
Answered- Abandoned Call Historical Report	Historical Summary	Provides answer and abandon bucket reports for the selected call types. Bucket columns are renamed to reflect the UCCE bucket intervals.	
Call Type Configuration Report	Configuration	Provides listing of all call type configuration details.	
Call Type Day of Week Report	Historical Summary	Provides key call type metric by day of week. Used to evaluate and compare call volumes by day. Use the 30 and 60 minute intervals to view the volumes over the course of a day.	
Call Type Historical Counts Report	Historical Summary	Provides complete set of call type metrics for counts call types.	
Call Type Historical IVR Report	Historical Summary	Provides complete set of call type metrics for IVR call types.	
Call Type Historical Report	Historical Summary	Provides complete set of call type metrics for the selected call types and period.	
Call Type Real Time Counts Report	Real-time	Provides complete set of call type real-time metrics for the selected counts call type set.	
Call Type Real Time IVR Report	Real-time	Provides complete set of call type real-time metrics for the selected IVR call type set.	
Call Type Real Time Report	Real-time	Provides complete set of call type real-time metrics for the selected call type set.	
Skill Group Agent Historical Report	Historical Summary	Provides complete set of agent and skill group metrics for the cross section of the selected agents and skills.	
Skill Group Configuration Report	Configuration	Provides listing of skill group configuration details including teams and agents.	
Skill Group Day Of Week Report	Historical Summary	Provides key skill group metric by day of week. Used to evaluate and compare call volumes by day. Use the 30 and 60 minute intervals to view the volumes over the course of a day.	



Report Name	Report Type	Purpose	
Skill Group Historical Call Activity Chart	Historical Summary	Provides a comparison of Calls Offered to Calls Abandoned in chart format.	
Skill Group Historical Calls Over Time Chart	Historical Summary	Provides a comparison of Abandoned Calls to Received Calls in chart format.	
Skill Group Historical Report	Historical Summary	Provides complete set of skill group metric for the selected skill groups, period, and interval.	
Skill Group Real Time Active Calls Chart	Real-time	Provides a comparison of Calls-In-Progress and Calls-In- Queue.	
Skill Group Real Time Agent Availability Chart	Real-time	Provides a comparison of Agent states.	
Skill Group Real Time Agent State Chart	Real-time	Provides charts based on Skill Groups and Agent States.	
Skill Group Real Time Report	Real-time	Provides complete set of skill group real-time metrics for the selected skill group set.	

## **Chapter 3. Database Access**

Permissions on data access are one of the most critical aspects of database administration. This requires a balance of control based on compliance requirements.

**Important:** Access to the database is limited to eLoyalty employees *only*.

The following sections list authorized logins:

- "Required Logins" on page 11.
- "Additional Logins for icIntellect" on page 12.
- "Additional Logins for icApplications Server and icRoute" on page 12.

#### **Required Logins**

The following logins are always required:

- HCS\HCS Admins This login is required for icIntellect administrators.
- HCS\SQL Admins This login is required for administrators of the SQL database used by icIntellect.
- **HCS\svc\_ic\_SQL** This login is required for all SQL Server services.
- **HCS\svc\_ic\_RPT** This login is required for Reporting Server service.
- HCS\icApps PS This login is used by all members assigned to the Professional Services team.
- HCS\icApps Development This login is used by all members assigned to the Development team.
- HCS\eloyalty support This login is used for CCMS access.

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### Additional Logins for icIntellect

The following additional logins are needed for icIntellect:

- **TBD\icApps Users** An NT group needs to be added for each client.
- **icIntellectRSUser** This is used for all data sources connections for reporting.
- Icaseluser This is used for link server connections.

### Additional Logins for icApplications Server and icRoute

The following additional logins are needed for the icApplications server and for icRoute:

- HCS\icApps Admin
- distributor\_admin
- icAppsAdmin
- icaproduser
- icaseluser This is used for link server connections.
- TBD\icApps Users An NT group needs to be added for each client.

## **Chapter 4. Database Objects Naming Standards**

The following naming standards apply to all database objects:

- Tables: Prefix all tables with ict\_
  - Tables in the ICM database: Prefix with ict\_Icm
  - Tables in the CTG database: Prefix with ict\_Ctg
  - Tables in the CTG database related to UCM: Prefix with ict\_Ucm
- Views: Prefix all views with icv\_
- Functions: Prefix all functions with icf\_
- Synonyms: Prefix all synonyms with ics\_
- Stored Procedures: Prefix all stored procedures with icx\_
  - Stored Procedures that directly connect to a main dataset for reporting name must reference the actual report name.
- Index:
  - Unique Clustered Primary Key: CUPK\_
  - Clustered: Prefix with CPK\_
- Configuration Tables (regardless of database): ict\_Sys
- Synonyms: Synonyms must reference the exact office name with ics\_
  - Synonyms connected to real-time data sources must reference the link server name.

## **Chapter 5. Data Retention**

The goal of the data retention policy is to outline, for developers, proper data retention settings for disposal of data records stored in icIntellect databases. This chapter provides the default retention settings that are implemented at installation.

In some instances, this retention policy may be temporarily suspended or adjusted depending on requirements of the client. In some instances, this policy's disposal schedule may conflict with the need to produce data relevant to the client's internal procedures. If this is the case, then the need to comply fully with the requirements will override this policy, causing this policy to be temporarily suspended until the matter in question is satisfactorily resolved.

It should be noted that disk space for new installations is based on the default settings. Any changes in these settings may require additional disk space.

The tables in the following sections list all the schedules that concern data retention:

- "Data Retention Policies Over One Year" on page 16.
- "Data Retention Policies Over Three Years" on page 18.
- "Data Retention Over Five Years" on page 20.



### Data Retention Policies Over One Year

Information in the following table represents default settings. The CVP Server is custom development so the table name can be added, removed, and renamed.

The following table represents data retention policies over a one year period.

#### Table: Data Retention Policies for One Year

Database	Table Name	Field Retention Based On	ntion Detail		1 Year		
				15 Min	30 Min	Hour	
		Days	90	370	370	370	
icIntellect	ict_Syslog	LogJobStartDateTime	Х				
CTG	ict_CtgCallDetail	DateTimeDisconnect	Х				
CTG	ict_CtgCallInteraction	StartTime	Х				
CTG	ict_CtgCallSegment	CallDisconnectTime	Х				
CTG	ict_CtgCallTransfer	TransferStartTime	Х				
CTG	ict_CtgExternalCallSummary	DateTime		0	Х	Х	
CTG	ict_CtgGroupInboundSummary	DateTime		0	Х	Х	
CTG	ict_CtgInteractionSummary	DateTime		0	Х	Х	
CTG	ict_CtgPhoneSummary	DateTime		0	Х	Х	
CTG	ict_SysLog	LogJobStartDateTime	Х				
CTG	ict_UcmCallDetail	DateTimeDisconnect	Х				
CTG	ict_UcmCdr	dateTimeDisconnect	Х				
CTG	ict_UcmHold	DateTime	Х				
ICM	ict_IcmAgentEventDetail	DateTime	Х				
ICM	ict_IcmAgentLogout	LogoutDateTime	Х				
ICM	ict_IcmAgentSkillGroupLogout	LogoutDateTime	Х				
ICM	ict_IcmAgentSkillGroupSummary	DateTime		0	Х	Х	
ICM	ict_IcmAgentSummary	DateTime		0	Х	Х	
ICM	ict_IcmCallTypeSummary	DateTime		0	Х	Х	
ICM	ict_IcmRouteCallDetail	DateTime	Х				
ICM	ict_IcmRouteCallVariable	DateTime	Х				
ICM	ict_IcmSkillGroupSummary	DateTime		0	Х	Х	
ICM	ict_IcmTerminationCallDetail	DateTime	Х				
ICM	ict_IcmTerminationCallVariable	DateTime	Х				
ICM	ict_SysLog	LogJobStartDateTime	Х				
CVP	ict_CvpCall	dbdatetime	Х				



Database	Table Name	Field Retention Based On			1 Year	,
				15 Min	30 Min	Hour
		Days	90	370	370	370
CVP	ict_CvpCallEvent	dbdatetime	Х			
CVP	ict_CvpCallIcmInfo	dbdatetime	Х			
CVP	ict_CvpCallSessionDetail	StartDateTime	Х			
CVP	ict_CvpCallSessionSummary	DateTime		0	Х	Х
CVP	ict_CvpDialogSessionDetail	CallStartDate	Х			
CVP	ict_CvpDialogSessionSummary	DateTime		0	Х	Х
CVP	ict_CvpErrorSessionDetail	CallStartDate	Х			
CVP	ict_CvpErrorSessionSummary	DateTime		0	Х	Х
CVP	ict_CvpOutgoingEccVariable	dbdatetime	Х			
CVP	CvpTransactionSessionDetail	CallStartDate	Х			
CVP	CvpTransactionSessionSummary	DateTime		0	Х	Х
CVP	ict_CvpVxmlCustomContent	dbdatetime	Х			
CVP	ict_CvpVxmlElement	dbdatetime	Х			
CVP	ict_CvpVxmlElementDetail	dbdatetime	Х			
CVP	ict_CvpVxmlElementFlag	dbdatetime	Х			
CVP	ict_CvpVxmlError	dbdatetime	Х			
CVP	ict_CvpVxmlHotEvent	dbdatetime	Х			
CVP	ict_CvpVxmlHotLink	dbdatetime	Х			
CVP	ict_ict_CvpVxmlSession	dbdatetime	Х			
CVP	ict_CvpVxmlSessionVariable	dbdatetime	Х			
CVP	ict_CvpVxmlVoiceInteractDetail	dbdatetime	Х			
CVP	ict_SysLog	LogJobStartDateTime	Х			
LST	ict_LstActivity	StartTime	Х			
LST	ict_LstDialerStatusDetail	UpdateTimeUTC	Х			
LST	ict_LstDialingList	UpdateTime	Х			
LST	ict_LstDialingListSet	UpdateTime	Х			
LST	ict_LstDialingListSetRun	CREATE_DATE	Х			
LST	ict_LstImportEntry	 UpdateTime	Х			
LST	ict_LstImportResult	StartDate	Х			
LST	ict_LstImportRun	RunDate	Х			
LST	ict_SysLog	LogJobStartDateTime	Х			



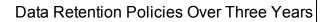
### **Data Retention Policies Over Three Years**

Information in the following table represents default settings. The CVP Server is custom development so the table name can be added, removed, and renamed.

The following table represents data retention policies over a three year period.

#### Table: Data Retention Policies for Three Years

Database Table Name Field Retentio		Field Retention	Detail		3 Years	\$
		Based On		Day	Week By Mth	Week
		Days	90	1095	1095	1095
icIntellect	ict_Syslog	LogJobStartDateTime	Х			
CTG	ict_CtgCallDetail	DateTimeDisconnect	Х			
CTG	ict_CtgCallInteraction	StartTime	Х			
CTG	ict_CtgCallSegment	CallDisconnectTime	Х			
CTG	ict_CtgCallTransfer	TransferStartTime	Х			
CTG	ict_CtgExternalCallSummary	DateTime		Х	Х	Х
CTG	ict_CtgGroupInboundSummary	DateTime		Х	Х	Х
CTG	ict_CtgInteractionSummary	DateTime		Х	Х	Х
CTG	ict_CtgPhoneSummary	DateTime		Х	Х	Х
CTG	ict_SysLog	LogJobStartDateTime	Х			
CTG	ict_UcmCallDetail	DateTimeDisconnect	Х			
CTG	ict_UcmCdr	dateTimeDisconnect	Х			
CTG	ict_UcmHold	DateTime	Х			
ICM	ict_IcmAgentEventDetail	DateTime	Х			
ICM	ict_IcmAgentLogout	LogoutDateTime	Х			
ICM	ict_IcmAgentSkillGroupLogout	LogoutDateTime	Х			
ICM	ict_IcmAgentSkillGroupSummary	DateTime		Х	Х	Х
ICM	ict_IcmAgentSummary	DateTime		Х	Х	Х
ICM	ict_IcmCallTypeSummary	DateTime		Х	Х	Х
ICM	ict_IcmRouteCallDetail	DateTime	Х			
ICM	ict_IcmRouteCallVariable	DateTime	Х			
ICM	ict_IcmSkillGroupSummary	DateTime		Х	Х	Х
ICM	ict_IcmTerminationCallDetail	DateTime	Х			
ICM	ict_IcmTerminationCallVariable	DateTime	Х			
ICM	ict_SysLog	LogJobStartDateTime	Х			
CVP	ict_CvpCall	dbdatetime	Х			





CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallIcmInfo CvpCallSessionDetail CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpErrorSessionSummary	Field Retention Based On Days dbdatetime dbdatetime StartDateTime DateTime CallStartDate DateTime CallStartDate DateTime dbdatetime	90 X X X X	Day 1095 	Week By Mth 1095 Constant X	Week 1095 
CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallIcmInfo CvpCallSessionDetail CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpErrorSessionSummary	dbdatetime dbdatetime StartDateTime DateTime CallStartDate DateTime CallStartDate DateTime	X X X X	X	Mth 1095	X
CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallIcmInfo CvpCallSessionDetail CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpErrorSessionSummary	dbdatetime dbdatetime StartDateTime DateTime CallStartDate DateTime CallStartDate DateTime	X X X X	X	X	X
CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallIcmInfo CvpCallSessionDetail CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpErrorSessionSummary	dbdatetime StartDateTime DateTime CallStartDate DateTime CallStartDate DateTime	X X X	Х		
CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallSessionDetail CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpOutgoingEccVariable	StartDateTime DateTime CallStartDate DateTime CallStartDate DateTime	X X X	Х		
CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpCallSessionSummary CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpOutgoingEccVariable	DateTime CallStartDate DateTime CallStartDate DateTime	X X	Х		
CVP ict_C CVP ict_C CVP ict_C CVP ict_C	CvpDialogSessionDetail CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpOutgoingEccVariable	CallStartDate DateTime CallStartDate DateTime	Х	Х		
CVP ict_0 CVP ict_0 CVP ict_0	CvpDialogSessionSummary CvpErrorSessionDetail CvpErrorSessionSummary CvpOutgoingEccVariable	DateTime CallStartDate DateTime	Х		X	Х
CVP ict_0	CvpErrorSessionDetail CvpErrorSessionSummary CvpOutgoingEccVariable	CallStartDate DateTime			Х	Х
_	CvpErrorSessionSummary CvpOutgoingEccVariable	DateTime		Х		
CVP ict (	CvpOutgoingEccVariable		V	Х		
		dbdatetime	V		Х	Х
CVP ict_0	TransactionSessionDetail		~			
CVP Cvp		CallStartDate	Х			
CVP Cvp	TransactionSessionSummary	DateTime		Х	Х	Х
CVP ict_0	CvpVxmlCustomContent	dbdatetime	Х			
CVP ict_0	CvpVxmlElement	dbdatetime	Х			
CVP ict_0	CvpVxmlElementDetail	dbdatetime	Х			
CVP ict_0	CvpVxmlElementFlag	dbdatetime	Х			
CVP ict_0	CvpVxmlError	dbdatetime	Х			
CVP ict_0	CvpVxmlHotEvent	dbdatetime	Х			
CVP ict_0	CvpVxmlHotLink	dbdatetime	Х			
CVP ict_i	ct_CvpVxmlSession	dbdatetime	Х			
CVP ict_0	CvpVxmlSessionVariable	dbdatetime	Х			
CVP ict_0	CvpVxmlVoiceInteractDetail	dbdatetime	Х			
CVP ict_S	SysLog	LogJobStartDateTime	Х			
LST ict_L	_stActivity	StartTime	Х			
LST ict_L	_stDialerStatusDetail	UpdateTimeUTC	Х			
		UpdateTime	Х			
LST ict_L	_stDialingListSet	UpdateTime	Х			
LST ict_L	_stDialingListSetRun	CREATE_DATE	Х			
LST ict_L	_stImportEntry	UpdateTime	Х			
LST ict_L	stImportResult	StartDate	Х			
LST ict_L	stImportRun	RunDate	Х			
LST ict_S	SysLog	LogJobStartDateTime	Х			



### **Data Retention Over Five Years**

Information in the following table represents default settings. The CVP Server is custom development so the table name can be added, removed, and renamed.

The following table represents data retention policies over a five year period.

#### Table: Data Retention Policies for Five Years

Database	e Table Name Field Retention			5	5 Years	;
		Based On		Month	Qtr	Year
		Days	90	1825	1825	1825
icIntellect	ict_Syslog	LogJobStartDateTime	Х			
CTG	ict_CtgCallDetail	DateTimeDisconnect	Х			
CTG	ict_CtgCallInteraction	StartTime	Х			
CTG	ict_CtgCallSegment	CallDisconnectTime	Х			
CTG	ict_CtgCallTransfer	TransferStartTime	Х			
CTG	ict_CtgExternalCallSummary	DateTime		Х	Х	Х
CTG	ict_CtgGroupInboundSummary	DateTime		Х	Х	Х
CTG	ict_CtgInteractionSummary	DateTime		Х	Х	Х
CTG	ict_CtgPhoneSummary	DateTime		Х	Х	Х
CTG	ict_SysLog	LogJobStartDateTime	Х			
CTG	ict_UcmCallDetail	DateTimeDisconnect	Х			
CTG	ict_UcmCdr	dateTimeDisconnect	Х			
CTG	ict_UcmHold	DateTime	Х			
ICM	ict_IcmAgentEventDetail	DateTime	Х			
ICM	ict_IcmAgentLogout	LogoutDateTime	Х			
ICM	ict_IcmAgentSkillGroupLogout	LogoutDateTime	Х			
ICM	ict_IcmAgentSkillGroupSummary	DateTime		Х	Х	Х
ICM	ict_IcmAgentSummary	DateTime		Х	Х	Х
ICM	ict_IcmCallTypeSummary	DateTime		Х	Х	Х
ICM	ict_IcmRouteCallDetail	DateTime	Х			
ICM	ict_IcmRouteCallVariable	DateTime	Х			
ICM	ict_lcmSkillGroupSummary	DateTime		Х	Х	Х
ICM	ict_lcmTerminationCallDetail	DateTime	Х			
ICM	ict_lcmTerminationCallVariable	DateTime	Х			
ICM	ict_SysLog	LogJobStartDateTime	Х			
CVP	ict_CvpCall	dbdatetime	Х			
CVP	ict_CvpCallEvent	dbdatetime	Х			
CVP	ict_CvpCallIcmInfo	dbdatetime	Х			



Database	Table Name Field Retention		Detail	ł	5 Years	;
		Based On		Month	Qtr	Year
		Days	90	1825	1825	1825
CVP	ict_CvpCallSessionDetail	StartDateTime	Х			
CVP	ict_CvpCallSessionSummary	DateTime		Х	Х	Х
CVP	ict_CvpDialogSessionDetail	CallStartDate	Х			
CVP	ict_CvpDialogSessionSummary	DateTime		Х	Х	Х
CVP	ict_CvpErrorSessionDetail	CallStartDate	Х			
CVP	ict_CvpErrorSessionSummary	DateTime		Х	Х	Х
CVP	ict_CvpOutgoingEccVariable	dbdatetime	Х			
CVP	CvpTransactionSessionDetail	CallStartDate	Х			
CVP	CvpTransactionSessionSummary	DateTime		Х	Х	Х
CVP	ict_CvpVxmlCustomContent	dbdatetime	Х			
CVP	ict_CvpVxmlElement	dbdatetime	Х			
CVP	ict_CvpVxmlElementDetail	dbdatetime	Х			
CVP	ict_CvpVxmlElementFlag	dbdatetime	Х			
CVP	ict_CvpVxmlError	dbdatetime	Х			
CVP	ict_CvpVxmlHotEvent	dbdatetime	Х			
CVP	ict_CvpVxmlHotLink	dbdatetime	Х			
CVP	ict_ict_CvpVxmlSession	dbdatetime	Х			
CVP	ict_CvpVxmlSessionVariable	dbdatetime	Х			
CVP	ict_CvpVxmlVoiceInteractDetail	dbdatetime	Х			
CVP	ict_SysLog	LogJobStartDateTime	Х			
LST	ict_LstActivity	StartTime	Х			
LST	ict_LstDialerStatusDetail	UpdateTimeUTC	Х			
LST	ict_LstDialingList	UpdateTime	Х			
LST	ict_LstDialingListSet	UpdateTime	Х			
LST	ict_LstDialingListSetRun	CREATE_DATE	Х			
LST	ict_LstImportEntry	UpdateTime	Х			
LST	ict_LstImportResult	StartDate	Х			
LST	ict_LstImportRun	RunDate	Х			
LST	ict_SysLog	LogJobStartDateTime	Х			

## **Chapter 6. Advanced Job Scheduler**

Having too many tasks and manually dealing with each one can be a daunting task. With the current architecture, call center data is loaded into tables in the icIntellect modules based on defined logic set in individual stored procedures. It has become pertinent to separate the logic of kick-starting the data loading process and enhancing it to allow for easier management and administration.

The Advanced Job Scheduler enables database administrators and application developers to control when and where various tasks take place in the database environment. These tasks can be time consuming and complicated, so using the Scheduler can help you to improve the management and planning of these tasks. In addition, by ensuring that many routine database tasks occur without manual intervention, you can lower operating costs, implement more reliable routines, minimize human error, and shorten the time windows needed. This allows Database administrators can schedule and monitor recurring database maintenance jobs such as backups or nightly data warehousing loads and extracts.

This process is currently limited to database maintenance plans.

In the ict\_SysEtlSchedules tab table...

# **MISSING INFORMATION!**

The process is as follows:

- 1. The ict\_SysEtIJob table contains all of the jobs that perform initial data feeds, summarization, and maintenance tasks.
- 2. Each of the database maintenance plans stored procedures objects.
- 3. There is a execute statement imbedded in each stored procedure:

EXEC dbo.icx\_SysEtlSchedules @JobID, NULL

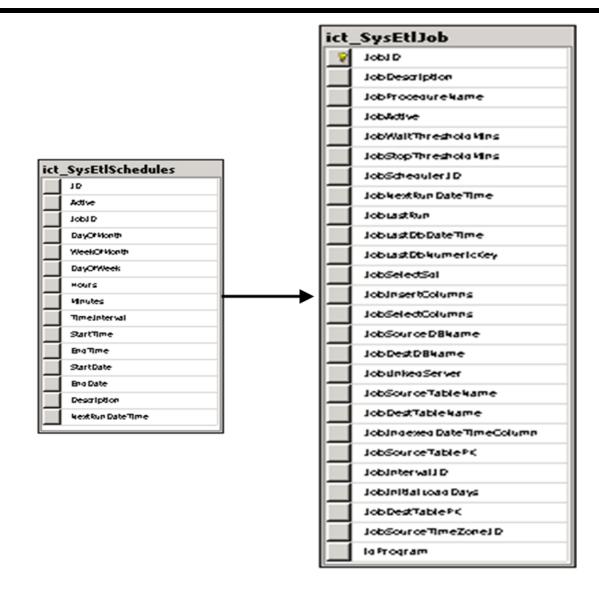
 This statement adds a new value to the JobNextRunDateTime, JobLastRun, and JobLastDbDateTime in the ict\_SysEtIJob table. These values are updated each time the job scheduler runs.

Here is the schema of the table:

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Field Name	Data Type	Description
ID	INT	Identification Counter.
Active TINYINT Signifies job status (A		Signifies job status (Active =1; Inactive=0).
JobID	JobID INT Unique ID of the Job.	
DayOfMonth	TINYINT	Range (1-31).
WeekOfMonthTINYINTUsed alongside [day of week]. For example: 1st (Monday) of the month.		Used alongside [day of week]. For example: 1st , 2nd (Monday) of the month.
DayOfWeek	TINYINT	Monday [1] – Sunday [7].
Hours	TINYINT	Clock Hour (0-24).
Minutes	TINYINT	Clock Minute (0-60).
TimeInterval	TINYINT	Wait time.
StartTime	TIME	Time job begins.
EndTime	TIME	Time job finishes.
StartDate	DATE	Date job commences.
EndDate	DATE	Date job finishes.
Description	VARCHAR	Notes.
NextRunDateTime	DATETIME	Date when next instance of the job will run.



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### Implement the Advanced Scheduler Process

To implement the advanced scheduler process, perform the following steps:

- 1. Populate the SysETLSchedules table with the desired values to define the job schedule.
- 2. The value in the **Active** field sets the job to be either active or inactive ("1" sets the job to be active; "0" sets the job to be inactive). Verify that the value in the **Active** field is "1".



### An Advanced Scheduler Example

The following table illustrates an example of an advanced scheduler.

**Note:** For readability, the table is in a vertical layout instead of the normal horizontal layout.

ID	1	2	3	4		
Active	1	1	1	1		
Job ID	501 <sup>1</sup>	777 <sup>2</sup>	101 <sup>3</sup>	301 <sup>4</sup>		
Day of Month	23	-	-	1		
Week of Month	-	-	-	1		
Day of Week	-	-	Monday	Wednesday		
Hours	10:00 PM	-	2:00 PM	9:00 PM		
Minutes	-	-	-	-		
Time Interval	-	23	-	-		
Start Time	-	05:00 AM	-	-		
End Time	-	08:59 AM	-	_		
Start Date	-	-	8/01/2012	_		
End Date	-	-	8/31/2012	-		
Next Run DateTime	-	-	-	-		
Description	-	-	-	-		
<sup>1</sup> Job 501 will run on the 23 <sup>rd</sup> of every month at 10:00 PM						

<sup>1</sup> Job 501 will run on the 23<sup>rd</sup> of every month at 10:00 PM.

<sup>2</sup> Job 777 will run every 23 minutes between the hours of 5:00 AM and 8:59 AM

<sup>3</sup> Job 101 will run every Monday at 2:00 PM between August 1, 2012 and August 31, 2012.

<sup>4</sup> Job 301 will run on the first Wednesday of each month at 9:00 AM.



#### Example 1

This example assumes that today is July 13, 2012. Even though the value in the **Day of Month** row is "23" and the value in the **Time Interval** is "25" minutes, Job 501 will next run on the first Tuesday of the month at 10:00 AM (that is, on Aug 7, 2012 at 10:00 AM). Meanwhile, Job 502 will run on July 23<sup>rd</sup> at 10:00 AM.

**Note:** For readability, the table is in a vertical layout instead of the normal horizontal layout.

ID	1	2
Active	1	1
Job ID	501	502
Day of Month	23	23
Week of Month	1	-
Day of Week	2	-
Hours	10	10
Minutes	00	00
Time Interval	25	25
Start Time	-	-
End Time	-	-
Start Date	-	-
End Date	-	-
Next Run DateTime	Aug. 7, 2012 10:00 AM	-
Description	-	-

#### Example 2

This example again assumes that today is July 13, 2012. In this scenario, there are two instances of the same Job. The Job will first run on July 23, 2012 at 10:00 AM (being the first sequential date of the two instances) and will run again on Aug 7, 2012 at 10:00 AM.

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#### Notes:

- 1. When values for **Hour** and/or **Minutes** and **Time Interval** are filled, **Hour** and/or **Minutes** takes precedence over **Time Interval**.
- 2. For readability, the table is in a vertical layout instead of the normal horizontal layout.

ID	1	2
Active	1	1
Job ID	501	502
Day of Month	23	23
Week of Month	1	-
Day of Week	2	-
Hours	10	10
Minutes	00	00
Time Interval	25	25
Start Time	-	-
End Time	-	-
Start Date	-	-
End Date	-	-
Next Run DateTime	Aug. 7, 2012 10:00 AM	July 23, 2012 10:00 AM
Description	-	-

### **Dealing with Precedence**

28

Precedence constraints have been built into the Advanced Job Scheduler mainly to eliminate ambiguity and user input errors. Assuming that users fill in all fields in the ict\_SysEtlSchedules table, the following fields will take precedence in the following order:



- 1. WeekOfMonth, DayOfWeek Hours: Minutes
- 2. WeekOfMonth , DayOfWeek TimeInterval
- 3. DayOfWeek Hours: Minutes
- 4. DayOfWeek TimeInterval
- 5. DayOfMonth Hours: Minutes
- 6. DayOfMonth TimeInterval
- 7. Hours: Minutes
- 8. TimeInterval

# **Chapter 7. Error Reporting**

The SQL Server is the database foundation for icIntellect Applications. Errors and warnings that are generated from the SQL Server are entered into the Windows Application Event Log.

The Application log contains events logged by the SQL Server and other programs. Many errors raised by the SQL Server Database Engine can be captured and resolved programmatically. Error handling capabilities are provided by the Transact-SQL language and by the data access application programming interfaces (APIs) that applications use to access data stored in the Database Engine.

There are two types of error messages generated by the SQL Server:

- Previously defined "canned" error messages generated by the SQL Server.
- Error messages that have been created by developers, using a system stored procedure. These are error messages with an error number *greater than* 50000. Error numbers lower than 50001 are reserved by the SQL Server, and error numbers 50001 and higher are reserved for icIntellect reporting purposes.

Developers can create error messages with a severity level between "0" and "25." The higher the severity level, the more serious the error. Messages range from informational on the low end to notifications of hardware failures on the high end. The messages about which you should be concerned begin at severity level "10." Any error severity of "19" and greater is more serious and will stop the current batch from executing.

Error handing has been incorporated into all icIntellect databases to track errors generated through reporting objects and data imports. With the integration of icIntellect into the icApplications application all stored procedures that are attached to the main report dataset contain logic to send error messages to the Windows Application Event Log. CCMC monitors the Windows Application Event Log and will be able to report these errors to the appropriate service team.

For more information about error guidelines, please review the *icIntellect: Report Generated Error Guidelines* document.

For further information concerning logic for report error submissions please see the *icIntellect: Development and Management Guidelines for Data Warehouse and Reporting* (IN00-9132-01) document.

# **Chapter 8. Database Maintenance**

The role of system databases for the functioning of SQL Server cannot be underestimated due to the significant amount of information which is stored within these databases. System databases which are available in SQL Server 2008R2 are Master, MSDB, MODEL, TempDB, ReportServer, and ReportServerTempDB. User databases contain all of the company's business data. Without the uninterrupted ability to store and retrieve data, business would grind to a halt. Besides its people, data is increasingly the most important asset in any enterprise.

If you have proper backups of all the system and user databases then you can restore and recover the SQL Server system in the event of a system failure, such as a hard disk corruption.

For more information please see the *icApplications: Backup and Restore Strategy* document.

## **Chapter 9. Reporting**

This chapter includes the following topics:

- "Microsoft SQL Server Reporting Services (SSRS)" on page 35.
- "Collections" on page 35.
- "Browser Standards" on page 39.

## Microsoft SQL Server Reporting Services (SSRS)

icIntellect utilizes a third party tool called Microsoft SQL Server Reporting Services (SSRS). icIntellect Reporting Services provides a full feature reporting service that can address the most challenging of client requirements.

Users have the option to perform the following tasks:

- Run reports.
- Download reports to different formats.
- Save and manage profiles.

### Collections

All standard reports are grouped into collections:

- As new reports are added this will be adjusted.
- Reports can be assigned to more the one collection.

The following table identifies the collections to which each report belongs.

Collections



36

Report Name	Collections			
Create New Profile Menu	<ul><li>Tools-Administration Collection</li><li>Tools-Users Collection</li></ul>			
Manage Report Profile Menu	<ul><li>Tools-Administration Collection</li><li>Tools-Users Collection</li></ul>			
Override User ID	Tools-Administration Collection			
Report Viewer	<ul><li>Tools-Administration Collection</li><li>Tools-Users Collection</li></ul>			
icIntellect (viewer)	<ul><li>Tools-Administration Collection</li><li>Tools-Users Collection</li></ul>			
Agent Configuration Report	<ul><li>Agent Reports Collection</li><li>Configuration Reports Collection</li></ul>			
Agent Historical Report	<ul><li>Agent Reports Collection</li><li>Historical Reports Collection</li></ul>			
Agent Not Ready Detail Report	<ul> <li>Agent Reports Collection</li> <li>Detail Reports Collection</li> <li>Historical Reports Collection</li> </ul>			
Agent Real Time Chart	<ul> <li>Agent Reports Collection</li> <li>Real Time Reports Collection</li> <li>Demonstration Favorites Collection</li> <li>Dashboards Collection</li> </ul>			
Agent Real Time Report	<ul><li>Agent Reports Collection</li><li>Real-time Reports Collection</li></ul>			
Agent Skill Group Historical Report	<ul> <li>Agent Reports Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			
Agent Skill Group Real Time Report	<ul> <li>Agent Reports Collection</li> <li>Real-time Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			
Agent Team Configuration Report	<ul><li>Agent Reports Collection</li><li>Configuration Reports Collection</li></ul>			
Agent Team Detail Historical Report	<ul> <li>Agent Reports Collection</li> <li>Detail Reports Collection</li> <li>Historical Reports Collection</li> </ul>			



Report Name	Collections		
Agent Team Detail Skill Group Historical Report	<ul> <li>Agent Reports Collection</li> <li>Detail Reports Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>		
Agent Team Historical Report	<ul><li>Agent Reports Collection</li><li>Historical Reports Collection</li></ul>		
Agent Team Not Ready Detail Report	<ul> <li>Agent Reports Collection</li> <li>Detail Reports Collection</li> <li>Historical Reports Collection</li> </ul>		
Agent Team Real Time Report	<ul><li>Agent Reports Collection</li><li>Real-time Reports Collection</li></ul>		
Agent Team Skill Group Historical Report	<ul> <li>Agent Reports Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>		
Answered Abandoned Call Historical Report	<ul><li>Call Type Reports Collection</li><li>Historical Reports Collection</li></ul>		
Call Type Configuration Report	<ul><li>Call Type Reports Collection</li><li>Configuration Reports Collection</li></ul>		
Call Type Day Of Week Report	<ul><li>Call Type Reports Collection</li><li>Historical Reports Collection</li></ul>		
Call Type Historical Counts Report	<ul><li>Call Type Reports Collection</li><li>Historical Reports Collection</li></ul>		
Call Type Historical IVR Report	<ul><li>Call Type Reports Collection</li><li>Historical Reports Collection</li></ul>		
Call Type Historical Report	<ul><li>Call Type Reports Collection</li><li>Historical Reports Collection</li></ul>		
Call Type Real Time Counts Report	<ul><li>Call Type Reports Collection</li><li>Real-time Reports Collection</li></ul>		
Call Type Real Time IVR Report	<ul><li>Call Type Reports Collection</li><li>Real-time Reports Collection</li></ul>		
Call Type Real Time Report	<ul><li>Call Type Reports Collection</li><li>Real-time Reports Collection</li></ul>		
Command Center Dashboard	Dashboards Collection		
External Call By Country Report	Call Accounting Reports Collection		

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Report Name	Collections			
External Call By Number Report	Call Accounting Reports Collection			
External Call Detail Report	<ul><li>Call Accounting Reports Collection</li><li>Detail Reports Collection</li></ul>			
External Call Most Active Report	Call Accounting Reports Collection			
icDesktop Agent History Report	icApplications Reports Collection			
icDesktop Messaging Report	icApplications Reports Collection			
Interaction Detail Report	<ul><li>Call Accounting Reports Collection</li><li>Detail Reports Collection</li></ul>			
Interaction Search Report	<ul><li>Call Accounting Reports Collection</li><li>Detail Reports Collection</li></ul>			
Phone By Number Report	<ul><li>Call Accounting Reports Collection</li><li>Detail Reports Collection</li></ul>			
Phone Detail Report	<ul><li>Call Accounting Reports Collection</li><li>Detail Reports Collection</li></ul>			
Phone Summary Report	Call Accounting Reports Collection			
Skill Group Agent Historical Report	<ul> <li>Agent Reports Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			
Skill Group Configuration Report	<ul><li>Configuration Reports Collection</li><li>Skill Group Reports Collection</li></ul>			
Skill Group Day Of Week Report	<ul><li>Historical Reports Collection</li><li>Skill Group Reports Collection</li></ul>			
Skill Group Historical Call Activity Chart	<ul> <li>Dashboards Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			
Skill Group Historical Calls Over Time Chart	<ul> <li>Dashboards Collection</li> <li>Historical Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			
Skill Group Historical Report	<ul><li>Historical Reports Collection</li><li>Skill Group Reports Collection</li></ul>			
Skill Group Real Time Active Calls Chart	<ul> <li>Dashboards Collection</li> <li>Real-time Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>			



Report Name	Collections		
Skill Group Real Time Agent Availability Chart	<ul> <li>Dashboards Collection</li> <li>Real-time Reports Collection</li> <li>Skill Group Reports Collection</li> </ul>		
Skill Group Real Time Agent State Chart	<ul><li>Dashboards Collection</li><li>Skill Group Reports Collection</li></ul>		
Skill Group Real Time Report	<ul><li>Real-time Reports Collection</li><li>Skill Group Reports Collection</li></ul>		

## **Browser Standards**

In Reporting Services, you use your browser, both to run reports and to access the Report Manager, a Web-based tool for managing and viewing report server content.

Although you can export reports to formats used by other desktop applications, the default rendering format for icIntellect reports is either HTML 3.2 or HTML 4.0; the browser type and version determine which format is used. Users can view reports with any browser that supports HTML 3.2 or HTML 4.0, however, functionality may vary depending on the browser and whether scripting is enabled.

For more information see the *icIntellect: Reporting Services Browser Support* document.

# Chapter 10. Multi Language

In order to support international customers through reporting, supporting different cultures and languages through our applications is essential for being successful. This section provides the design details of icIntellect Reporting Services Multi-Language functionality.

This functionality changes the language of specific items in reports based on the users' default settings. These settings are currently located in the ...

# **MISSING INFORMATION!**

The following items will be translated in reports:

- The Report Name
- Parameter prompt statements
- Column headers
- Row headers
- Various text fields not related to data
- Tool tips
- Header statements
- Footer statements
- Various Datasets for filter selection.

This chapter includes the following topics:

- "Data Structure Design" on page 41.
- "Report Data Sets" on page 44.
- "Report Parameters" on page 44.
- "Lookup Function" on page 45.

### Data Structure Design

The base of the Multi-Language functionality exists in the icAppsAAA\_APM database. This functional design requires one table and one view:

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42

# **MISSING INFORMATION!**

The following table describes the schema for the ict\_LanguageTranslation table in the icAppsAAA\_ APM database:

Attribute Name	Attribute Type	Comment			
LangID	INT	Notes			
TagName	NVARCHAR (150)	The first two letters of the <b>TagName</b> consist of one of the following prefix values: • CT – Column Name • PF – Page Footer • PH – Page Header • PM – Parameter • RT – Report Title			
LanguageTranslation	NVARCHAR(150)	-			
idProgram	INT	-			
*rowguid	UNIQUEIDENTIFIER	This column is added when replication is added to the database. When this happens, the following two stored procedures in icIntellect_ICM must be adjusted: • icx_rptAgentNotReadyDetail • icx_rptAgentTeamNotReadyDetail These reports contain column groups. They are dynamic in nature. In these stored procedures there is logic to insert records into the ict_LanguageTranslation table in the icAppsAAA_APM database. When new values are added to the ict_IcmReasonCode table, those values are added to the language table automatically, and the insert statement then needs to be adjusted by removing the comment for <b>rowguid</b> .			

This is accessed by the synonym ics\_LanguageTranslation for the databases on the icIntellect server.

View – icv\_ProgramUserDefaultList - Inside the view there is a piece of logic (see the following text box) that returns the default for the language.



SELECT [idProgram] ,AttributeNm ,AttributeCode ,[WindowId] ,[Value] FROM [icAppsAAA\_APM].[dbo].[vw\_UserAttributes] WHERE GroupTypeCode = 'General' AND AttributeCode = 'USER\_LANGUAGE' AND PropertyCode = 'LANGUAGE\_ID'

The UserDefault\_DSP dataset, located in every report, calls this view which is accessed by the ics\_ ProgramUserDefaultList synonym.

The following database objects need modifications on the icIntellect server and databases:

#### icIntellect:

- Tables The following column was added:
  - ict\_SysCallDirection TagName
  - ict\_SysInterval TagName
  - ict\_SysQueryFilters TagName
  - ict\_SysRefreshInterval TagName
  - ict\_SysRelativeRange TagName
- Views:
  - $\circ \ icv\_QueryFilters$
- Stored Procedure:
  - icx\_SysReportProfileMenu

#### icIntellect\_CTG1:

- Tables The following column was added:
  - ict\_SysInterval TagName
- Stored Procedures:
  - icx\_rptPhoneSummary
  - icx\_rptPhoneDetail

#### icIntellect: Design

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- icx\_rptPhoneByNumber
- icx\_rptInteractionSearch
- icx\_rptInteractionDetail
- icx\_rptExternalCallMostActive
- icx\_rptExternalCallDetail
- icx\_rptExternalCallByNumber

#### icIntellect\_ICM1:

- Tables The following column was added:
   o ict\_SysInterval TagName
- Stored Procedures:
  - icx\_rptAgentHistorical
  - icx\_rptAgentTeamSkillGroupHistorical
  - icx\_rptAgentTeamNotReadyDetail
  - icx\_rptAgentTeamHistorical
  - icx\_rptAgentTeamDetailSkillGroupHistorical
  - icx\_rptAgentTeamDetailHistorical
  - icx\_rptAgentNotReadyDetail
  - icx\_rptCallTypeDayOfWeek
  - icx\_rptSkillGroupHistorical
  - icx\_rptSkillGroupDayOfWeek
  - icx\_rptSkillGroupAgentHistorical
  - icx\_rptCallTypeHistoricalIVR
  - icx\_rptCallTypeHistoricalCounts
  - icx\_rptCallTypeHistorical

## **Report Data Sets**

LanguageTranslation\_DSP - This contains a select statement from the ict\_LanguageTranslation table located in icAppsAAA\_APM which is retrieved from the ics\_LanguageTranslation synonym.

## **Report Parameters**

Language Parameter - Returns the default language for the user. The default section is connected to the UserDefault\_DSP which has been modified to include the DefaultLanguageID field.



## **Lookup Function**

For each field that requires a translation, the Lookup Function is utilized. This function returns the first matching value for the specified name from a dataset that contains name/value pairs.

The Lookup Function is a four part function:

- Part 1: Field that needs to be translated.
- Part 2: Field from dataset that holds the matching value of Part 1.
- **Part 3:** Field replacing the current statement.
- **Part 4:** Name of the dataset containing the language translations.

#### Example:

=IIF(Lookup ("CT\_Counts", Fields!TagName.Value, Fields!LanguageTranslation.Value, "LanguageTranslation\_DSP") = Nothing, "CT\_Counts", Lookup

("CT\_Counts", Fields!TagName.Value, Fields!LanguageTranslation.Value,

"LanguageTranslation\_DSP"))

# **Chapter 11. Profile Management**

Profile management includes such tasks as renaming profiles. deleting profiles, and saving profiles.

This chapter includes the following topics:

- "Save Profile" on page 47.
- "Rename or Delete a Profile" on page 48.

## Save Profile

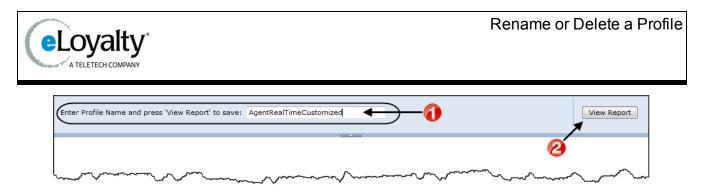
The Profile Menu functionality allows users to save reports with previously selected parameters. This means that they do not have to select parameters each time they open the report. This is almost like having a "Favorite" option in Internet Explorer. The architecture stores the explicit name and the values for each parameter.

When you run a report, the generated report includes a **Save** icon that links to the Create Profile Menu report. To save a profile, simply click on the **Save** icon. See the following screen capture.

Agent Collection(s)	System Agent Collection	<b>v</b>		Agents	s List(s) 72	106, 72107,	72108, 72	109, 72 💙		View R	eport
Relative Range	This Quarter 🗸			Interv	al W	eekly	~				
Start	11/15/2013			End	11	/15/2013					
Time Zone	(GMT-08:00) Pacific Tim	ie (US & Canai	ia) 🗸								
I4 4 1 of 5	5 🕨 🕅 100%	×	Fine	d   Next	<b>.</b>	) <b>(</b>	-				
(□) Agent Historical Report											
Report Submitted By:											
					Соц	ints				Av	erage T
<u>Agent</u>	≎ DateTime-Weekly	Handled 🔶 F			inbound On Hold	Xferred \$ In	Xferred Out	\$ Agent \$ Out	Aband Ring	Handle 💲	Hold (
Avila, Veronica - 7205	3	551	26		168		$\sim$	87 266	4	01:40	00:46

The page refreshes to display the Enter Profile Name page. See the following screen capture.

icIntellect: Design	
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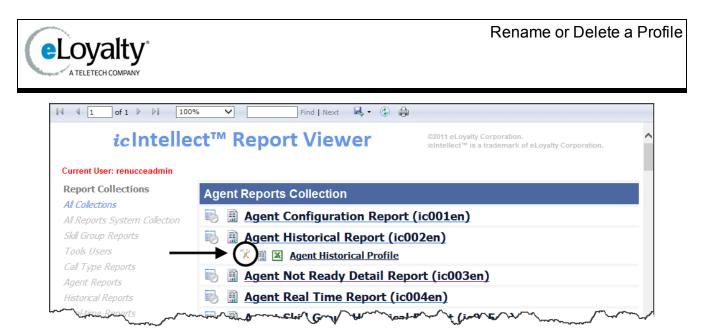
Enter a descriptive name for the new profile in the **Enter Profile Name and press 'View Report' to save** box. After entering the name, click on the **View Report** button to save the new profile using the name you entered. The Create New Profile Menu page is displayed to confirm that the profile has been created. Click on the **Home** icon to return to the icIntellect Home page. See the following screen capture.

	Create New Profile Menu	<i>ic</i> Intellect
	Click Here	5
	Agent Real Time Chart Grid	Ł
	Profile: "AgntRTGridProfile" created successfully!	5
	It will be available once you refresh the icIntellect™ Report Viewer.	5
	Profiles	{
	New Profile Name	E S
(		~~~~~~ \

Each time a user runs a report, the Report Server database logs the activities of the user by storing the parameters selected on the report. With this architecture, it is possible to capture new or changed parameters on the fly. The proposed solution will allow users to save the most recent parameters selected by users.

## Rename or Delete a Profile

On the main menu next to each report is the **Management Tool** icon (circled in the following screen capture). This icon enables a user to Rename a previously saved profile or to delete a profile.

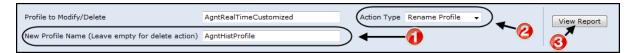


Click on the **Management Tool** icon. The Profile Management page is displayed.

#### To Rename a Profile

In the Profile Management page:

1. Enter a new name for the profile into the **New Profile Name** box.



- 2. Click anywhere in the **Action Type** box to display the drop-down menu and click on the **Rename Profile** option.
- 3. Click on the **View Report** button to rename the profile. A message is displayed to confirm that the profile has been successfully renamed.

#### To Delete a Profile

In the Profile Management page, click anywhere in the **Action Type** box to display the drop-down menu and click on the **Delete Profile** option.

Profile to Modify/Delete	AgntHistProfile	Action Type Delete Profile
New Profile Name (Leave empty for delete action)		0

Click on the **View Report** button to delete the profile.A message is displayed to confirm that the profile has been successfullydeleted.

# **Appendix A. Trademarks**

This page lists trademarks and registered trademarks that are included in this document.

The following terms are trademarks or registered trademarks of the eLoyalty Corporation in the United States and/or other countries:

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- icIntellect