

High Level Overview

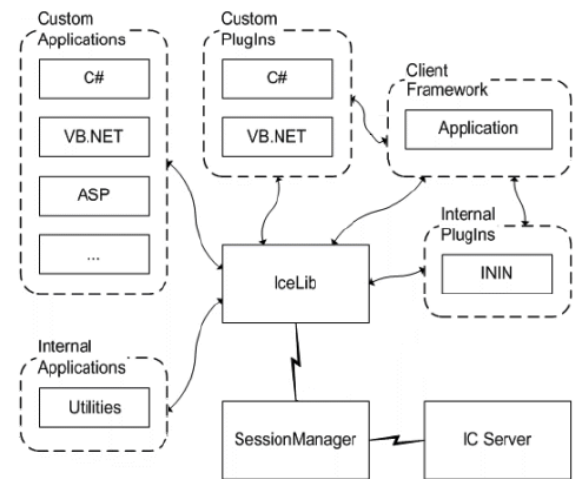
API Overview

Interaction Center Extension Library (IceLib)	.net API which can be used to create client, admin and supervisory applications
Interaction Handlers	Subroutines which are run on the CIC server. Handlers can be used to customize call flow and perform other server level customizations.
Client Add-In API	API to extend .net Client functionality by creating Add-Ins that can be loaded by the client.
Interaction Process Automation (IPA)	IPA Designer enables you to design and deploy automated processes that run via Interaction Process Automation (IPA) on your IC server.

CIC Architecture

At a high level, CIC is comprised of a number of subsystems each responsible for a different part of the system. Public client APIs such as IceLib communicate to the Session Manager subsystem which then relays messages to the rest of the server. Business process written in IPA are run on the Process Automation Server subsystem and Handlers run within the Interaction Processor (IP) subsystem.

As a developer, it is generally not critical to know about the subsystems that are working behind the scenes, but sometimes it does help to look in the logs of those subsystems when trying to debug an issue that is happening outside of your application.



Concepts and Acronyms

ACD	Automatic Call Distribution – the ability for calls to enter the system and be assigned to an agent.
CIC	Customer Interaction Center, the telephony server, IC for short.
IA	Interaction Administrator, where system configuration is done.
ICBM	Interaction Center Business Manager, where supervisory level tasks are done such as viewing calls in queue, agent status, listening to recordings, etc.
Workgroup	A workgroup is a logical grouping of users. Workgroups often have ACD queues associated with them.
Workstation	Also referred to as a station it is the phone used by a user. A workstation can be a physical phone or a softphone running on the user's computer.
Interaction Ids	All interactions in a system are assigned an Interaction Id (also referred to as a call id). Interaction Ids are a 10 digit number starting with 1, 2 or 3 and are non-unique as they can be repeated. When interacting with an interaction through the APIs, you are most likely referring to it by the Interaction Id e.g. 3001826923
Interaction Id Keys	Also referred to as a call id key, are a unique id for an interaction on that server or switchover pair. The interaction id key is created by taking the interaction key and appending the date e.g. 300182692320140105. The interaction id key is used when referring to the interaction that occurred in the past, such as when it is stored in the database or if you need to store a reference to it in a 3 rd party system.
Persistent Connections	When logged into a client application using a remote phone number, a persistent connection can be established so your phone is always connected to the CIC server even when not on a call. This connection is established after the first call and the advantage of it is that for subsequent calls, the connection to the remote number doesn't have to be reestablished which results in quicker connect times.

Switchover	To create redundancy in the system, IC servers can be setup in switchover pairs. When in a pair, there is a <i>primary</i> and a <i>backup server</i> . All data on the primary is replicated to the backup and in the event of a failure on the primary server the backup takes over and becomes the new primary. All interactions are lost when a switchover occurs, this means any calls, chats, emails or generic objects in the system will need to be recreated. The audio path for currently connected calls will still remain intact, but users on the calls will lose call control from their client.
Queue	A queue is a collection of interactions in CIC. Different queue types include Line, Workgroup, User and Station queues.
Interaction Attribute	Also called call attributes, interaction attributes are metadata about the call that are associated to it. Interaction attributes contain information such as party info, and call state, but can also include custom attributes. For information on all the system attributes, see the Interaction Attribute Guide

Tracing

All applications and APIs except ICWS use Genesys' proprietary logging system. Logs have the file extension .ininlog and can be viewed with the ININ Log Viewer application.

For trace messages to be logged, the ININ Tracing Initialization windows service must be installed and running. This service is installed with all PureConnect products, but can also be installed with the ININ Trace Viewer install.

Trace logs have topics which can trace data at different levels. The different topics assist in debugging and the trace levels control how much information is logged out. Trace levels can be set in the ININ Tracing Configuration application.

Interaction States

As an interaction flows through the system, its state can be represented as one of the following.

Alerting	A user is being notified that he or she has an incoming interaction. This state applies to inbound interactions.
Connected	Both parties are connected and are able to speak with each other. This state applies to inbound and outbound interactions.
Held	The interaction is on hold. This state applies to inbound and outbound interactions.
Messaging	The caller is leaving a voice mail message.
Offering	The interaction has been placed in a queue, but the interaction is not alerting. IC is determining if the called party is available to take the interaction. This state applies to inbound interactions only.
Parked	The Interaction is parked, waiting for the recipient user to pick it up.
Proceeding	The interaction is proceeding through the outside telephone network. Proceeding is used if a user has enabled Call Analysis. This state applies to outbound calls only.
System	The Interaction is being processed by the system.
Internal Disconnect	The Interaction has been disconnected internally and is no longer active. This state applies to inbound and outbound interactions.
External Disconnect	The Interaction has been disconnected externally and is no longer active. This state applies to inbound and outbound interactions.
Suspended	The interaction is suspended. This state applies to inbound and outbound interactions.



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