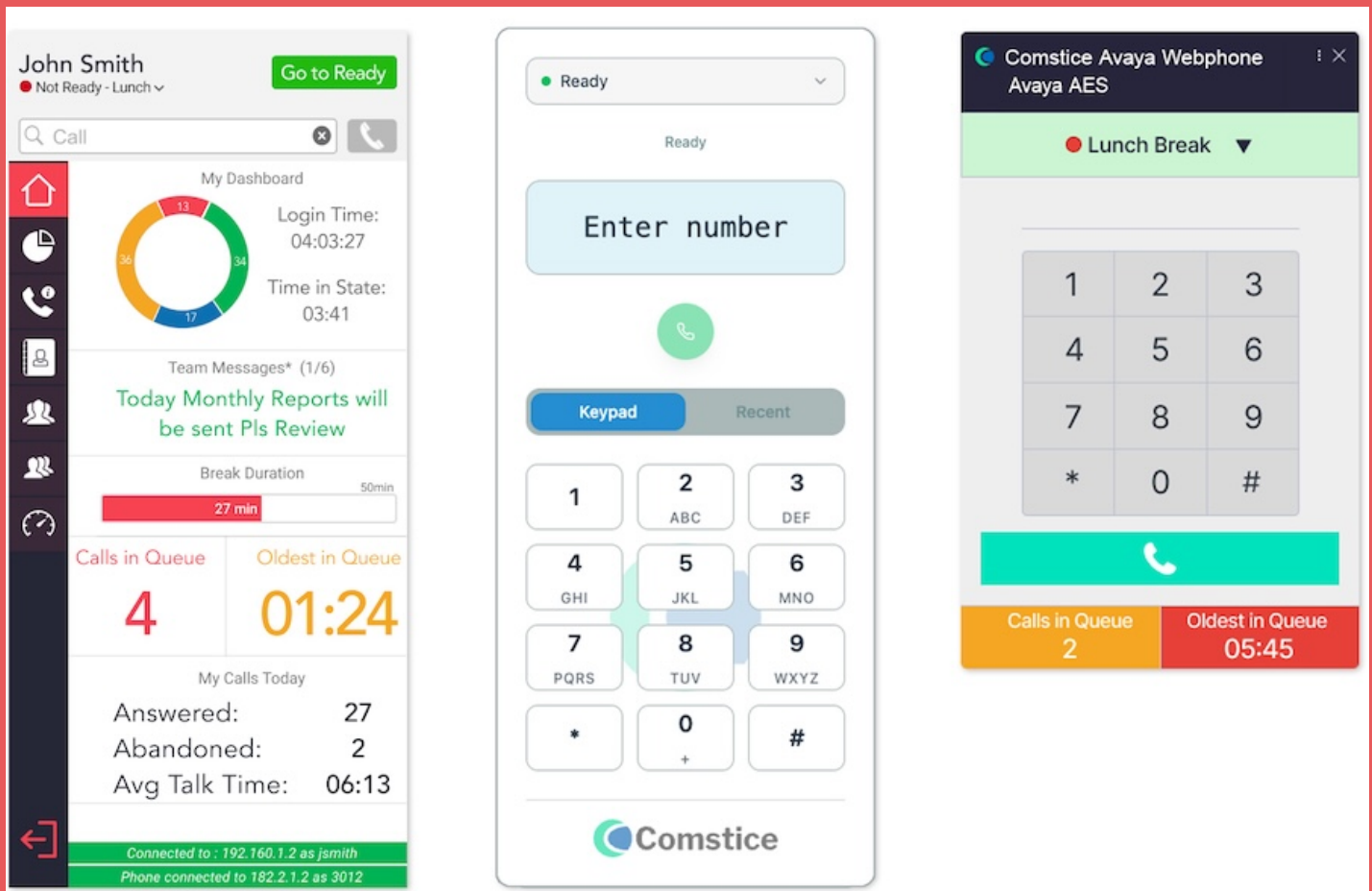


Comstice EPIC CTI Connector for Cisco

For Cisco Enterprise Users and Call Center Agents



Comstice CTI Connector for EPIC - Webphone Version

Comstice Webphone is a WebRTC Phone on the browser and it gets converted to a SIP Phone on the client's network. Comstice WebRTC Gateway helps WebRTC sessions to be converted to SIP and reach out to the company's enterprise telephony and the PSTN without installing anything on the user side. It runs **on-premises** or **in your private cloud**.

No Installation Needed

WebRTC standard helps users to utilise any modern web browser including Microsoft Edge to make and receive voice and video calls as well as screen sharing on the browser with full encryption. It is the same technology used by Microsoft Teams and similar services.

Agent Functionality

Comstice Webphone also includes Cisco Finesse agent login, state changes and call control features. It uses Cisco Finesse RESTful APIs. Therefore, for Cisco Finesse, it is not any different than

Supports Cisco CUCM

All Comstice Webphone scenarios support Cisco CUCM integrations. For enterprise users, Comstice Webphone can register as a third-party SIP Phone. For the Finesse agents, Comstice Webphone registering to Cisco CUCM as a third-party phone is not supported. Hence, it will register to Comstice SIP Proxy and Cisco CUCM will have a SIP Trunk with Comstice SIP Proxy.

Take aways about EPIC Webphone

- No need to go to a shared cloud call center service
- Webphone is not only for call center agents; enterprise users can use as well.
- No installation needed; No Jabber, no VPN client or any installation needed.
- Four times faster to handle calls and run outbound campaigns
- Faster Outsource agency integration and remote agent onboarding

Comstice CTI Connector for EPIC - Connector Version

Comstice CTI Connector is an agent console inside EPIC Hyberdrive pages that is used to create screen-pop and click to dial experience. It runs **on-premises** or **in your private cloud**.

Comstice CTI Connector does not include audio. It only includes Cisco Finesse features such as call control and state changes.

Cisco Phone for the Audio

Comstice CTI Connector does not include any audio / VoIP communication. Cisco Jabber softphone or IP Phone must be used by the agents.

Agent Functionality

Comstice CTI Connector provides Cisco Finesse agent login, state changes and call control features. It uses Cisco Finesse REST APIs and Websocket for the agent features.

No VPN Required

Comstice CTI Connector can work without any VPN required. You may still need VPN for the Cisco softphone.

Take aways about EPIC CTI Connector

- CTI Connector does not include any audio. Separate Cisco phone needed.

Project Plan

Step 1: Assessment and SoW

Comstice works with your EPIC analyst and telephony team to establish the following;

1. Exact EPIC product and activity in scope: patient chart, CRM Communication, contact center workspace
2. Whether the screen-pop will trigger with the call is ringing or answered
3. Whether users run Hyperdrive locally, through Citrix/VDI or as a published application.
4. Which phone numbers should be dialable for lick to dial
5. How EPIC users are mapped into Comstice CTI Connector agents; EPIC USer ID, employee ID, email, extension or a maintained mapping table.
6. Organization's ambiguity rules for shared household phone numbers, duplicate numbers and restricted patients.

SoW will also include a signed-off workflow matrix covering inbound, outbound, transfer, consult, voicemail and failed-match scenarios,

Step 2: Register Comstice CTI Connector and Obtain Specifications

Customer with the guidance from Comstice must create an application record through EPIC's developer process and request the required interfaces;

- Incoming CTI Integration
- Outgoing CTI Integration
- SMART on FHIR EHR launch, where contextual launch is useful
- Relevant patient or CRM communication APIs for customer use cases
- (Optional) TranscriptIngestion
- (Optional) DocumentCallAnalytics
- (Optional) Phone System Pause/resume for payment workflows

Epic requires client IDs for its web services, and the customer must activate the client record.

Comstice CTI Connector supports a no-patient-context state because agents may receive calls while they are not viewing a patient.

EPIC Outbound Calling Workflow

EPIC Outbound CTI capability allows users to make or end a call from a patient chart or other activity, log call details, and accept a call identifier from the phone system.

1. The user clicks a configured phone control in the patient or CRM activity
2. EPIC outgoing CTI workflow sends the Comstice CTI Gateway
 1. EPIC session ID
 2. Destination number
 3. Patient or CRM record context
 4. Calling department or queue
 5. A transaction/correlation ID
3. Comstice CTI Gateway validates authorization and normalizes the number to local Cisco CUCM Dial Plan
4. Comstice CTI Gateway finds the user's active webphone session
5. Cisco CUCM starts the call
6. Comstice CTI Connector receives the call over its WebSocket connection and displays call controls for the active call session
7. Comstice CTI Gateway returns an accepted/rejected result and call identifier
8. Subsequent call state events update Epic as supported by its CTI specifications.
9. The call is associated with the relevant patient or CRM communication record.

EPIC Inbound Workflow

1. Cisco CUCM and UCCX/UCCE receive the call
2. When an agent is assigned, Finesse sends Comstice CTI Gateway;
 1. ANI / Calling numnber
 2. DNIS / queue
 3. Agent Identifier
 4. Telephony Call ID / Cisco Call GUID
 5. Assignment and call state timestamps
3. Comstice CTI Gateway maps the telephony agent to active EPIC user / session.
4. The caller-matching service identifies possible EPIC records
5. Comstice CTI Gateway invokes EPIC's incoming CTI workflow.
6. EPIC opens the configured patient chart, CRM activity or search/selection activity
7. Comstice webphone simultaneously displays the caller and match status
8. When the call ends, Comstice CTI Gateway finalizes disposition and call metadata.

Inbound Phone Number Matching Policy

EPIC's Inbound CTI capability is specifically intended to open the appropriate chart or another EPIC activity when a call is received.

Matching policy does not automatically open a chart based on a non-unique phone number.

Match Result	Epic policy
One high-confidence permitted match	Open the configured activity
Multiple matches	Open a patient / contact selection activity
No match	Open CRM search/new caller workflow
Restricted or break glass record	Let Epic enforce its normal security workflow
Anonymous Caller	Open generic inbound call workspace
Agent not signed into Epic	Continue the call, queue a non-PHI notification and log the failure.

Call Records, Disposition, Analytics

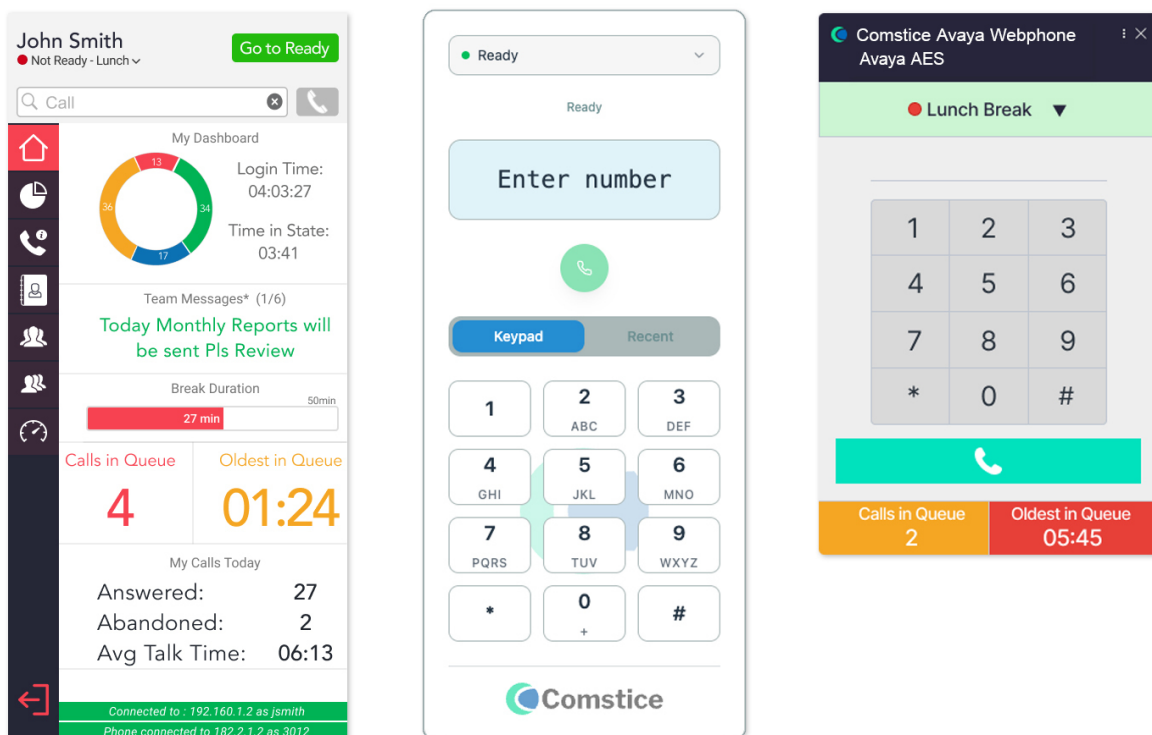
Below are the EPIC data parameters for handling call recording, disposition and analytics use cases;

- telephony_call_id
- epic_cti_transaction_id
- epic_communication_id
- patient_id, when authorised
- epic_user_id
- webphone_agent_id
- queue_id
- direction
- started_at / answered_at / ended_at
- disposition

Comstice Wephone Skins

Comstice Webphone has different design options based on your business requirements. It can be as simple as a mini webphone or it can have many built-in features such as call logs, team member states, real-time queue information, agent's daily performance.

Call logs and agent performance information can also be accessible as a separate side menu item, outside the webphone user interface.



EPIC CTI Connector vs Webphone

It is important to clarify the difference between Comstice EPIC CTI Connector vs Comstice EPIC Webphone. CTI Connector still requires a Cisco phone, or Cisco Softphone for the audio element. **Comstice Webphone includes Cisco Finesse call control and state change features as well as the built-in WebRTC softphone.**

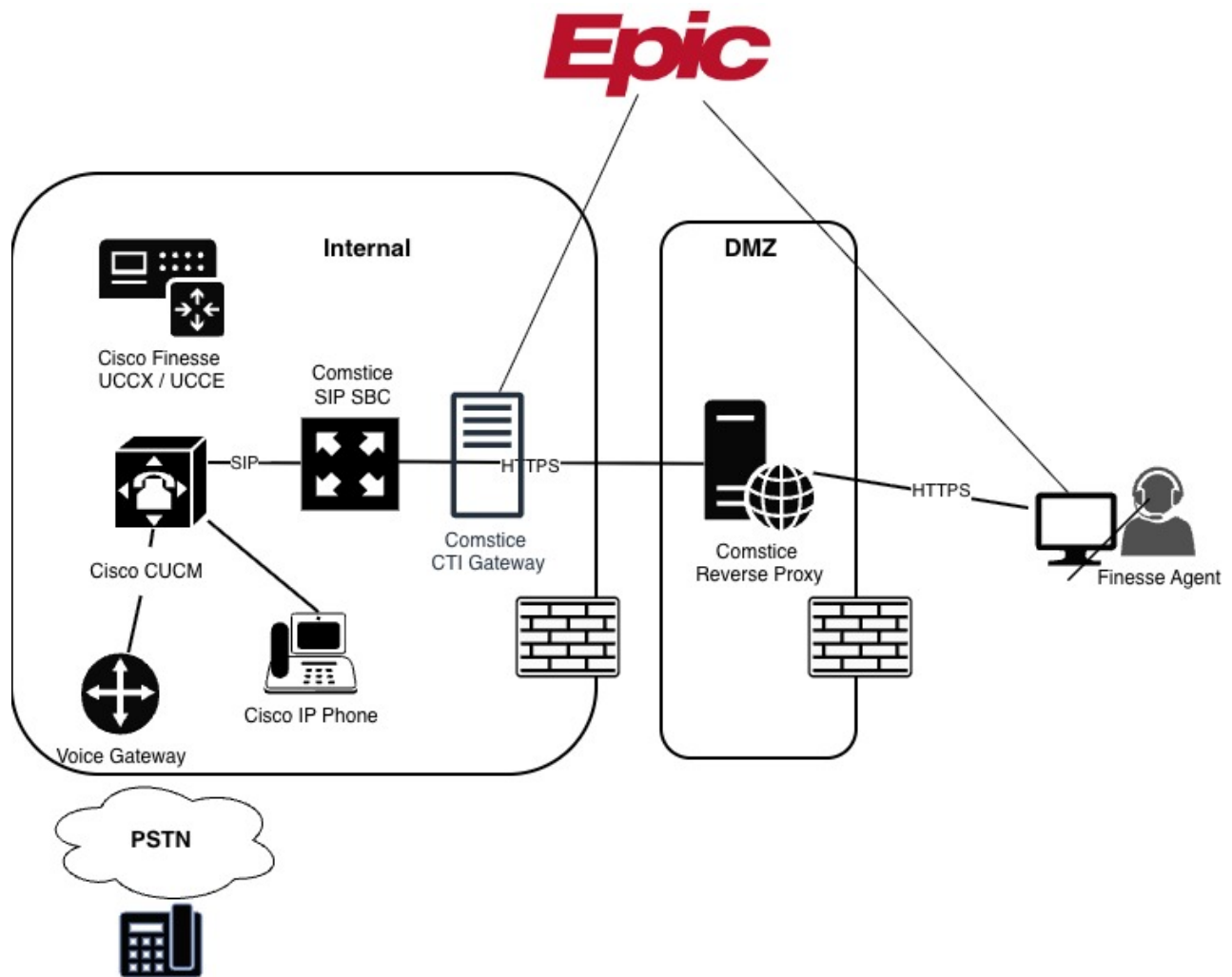
WebRTC is a standard that is supported by all the modern browsers. It enables secure, encrypted communication to the users.

For CTI Connector-only deployments, agent PC must have a separate Cisco Phone.

	Comstice CTI Connector	Comstice Webphone
Screen-pop of calling customer when a call arrives	Yes	Yes
Click to Dial from EPIC Contacts	Yes	Yes
Includes phone / audio functionality	No	Yes
VPNLess Remote Agents	Cisco MRA needed	Yes

Comstice CTI Connector Finesse Topology

Comstice Webphone solution can have the agent login details built-in and populate agent username, password and extension automatically. Finesse integration is done through Finesse RESTful APIs.



Comstice CTI Connector with Cisco CUCM

Comstice CTI Connector can also be integrated directly with Cisco CUCM, without any call center functionality needed.

