Comstice

Comstice Avaya CTI Router

Datasheet

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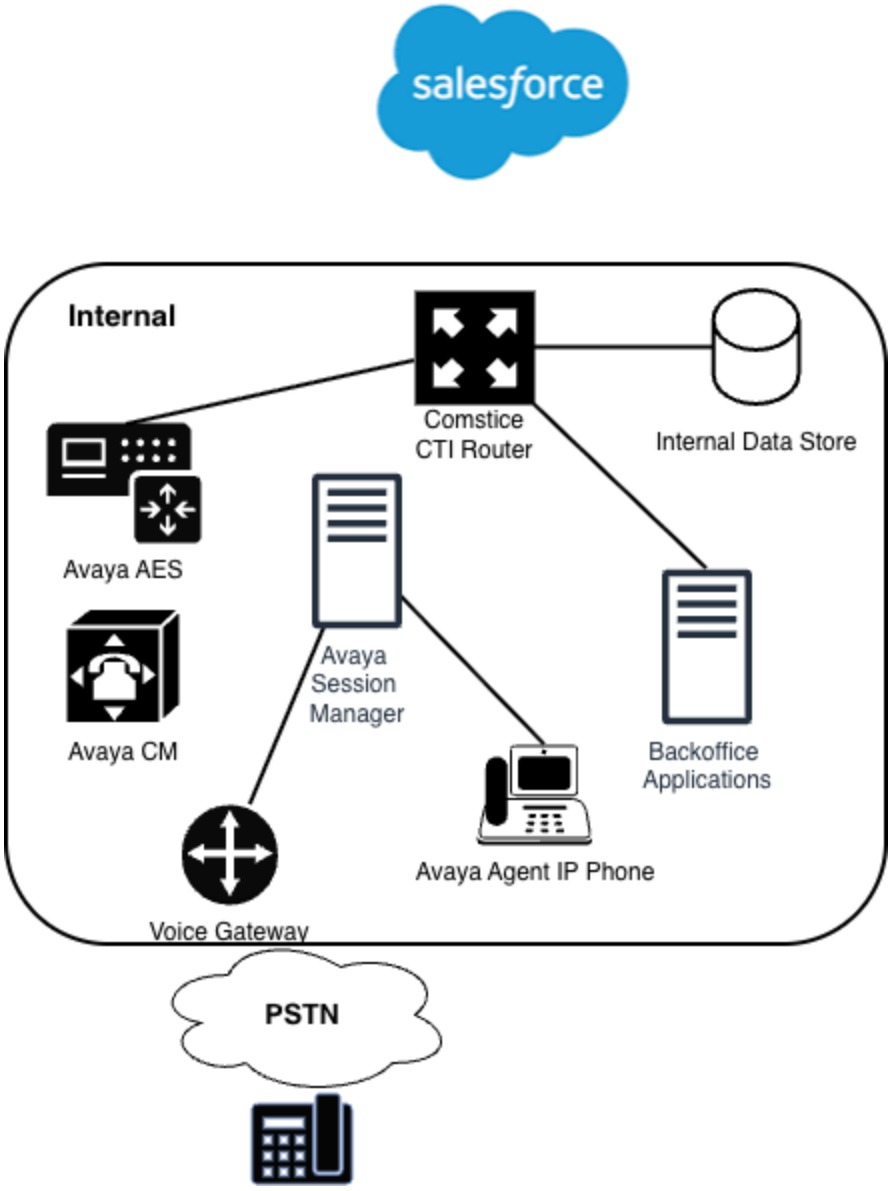
Comstice Avaya CTI Router is a third-party call control application for **Avaya Advanced Routing**. It helps to influence call routing on Avaya contact centers by communicating with external applications and Avaya services.

Comstice Avaya CTI Router can be used as an alternative to CT Suite Advanced Router feature.



Avaya Advanced Routing Use Cases

- Intelligent treatment based on the calling number
- Sending the call to the last agent that handled the caller, in case the call was dropped.
- Sending the caller to their account managers or priority skills
- Identifying VIP clients for better customer experience
- CRM screen-pop to agent's interface
- Integration with Comstice Salesforce Webphone for Salesforce screen-pop
- Integration with any other third-party service or application using RESTFul APIs.
- Integration with internal databases

How It Works

In a typical Aura/Elite deployment, the call flow is as follows;
PSTN/SIP trunk → Communication Manager (VDN/Vector) → AES → Comstice CTI Router → AES → CM (target VDN/skill/agent)

Comstice CTI Router is a third-party call-control application. It doesn't terminate media or own the dial plan — CM still owns those. AES is the CTI middleware. AES enables CTI applications to control and monitor telephony resources on Communication Manager, receiving requests from CTI applications and forwarding them to CM over the CSTA-based protocol.

How Comstice CTI Router Works

1. A call hits a VDN on CM and runs its associated vector.
2. The vector contains an adjunct routing link <CTI link #> step. This is the adjunct routing link process in CC Elite vector programming.
3. CM sends a CSTA RouteRequest event over the CTI link to AES, which forwards it via TSAPI to whichever client (Comstice CTI Router) has a route registration on that VDN. The request carries call data: ANI, DNIS, UCID, collected digits, UUI, VDN variables, and any data the vector has gathered through IVR steps.
4. Comstice CTI Router evaluates the request against its workflow logic — typical inputs are CRM dips (last-agent lookup, customer tier, open case), time-of-day, business rules, real-time queue stats pulled via TSAPI monitors, language preferences, and any data passed in UUI/UCID. Comstice CTI Router automatically directs users to the customer service agent who is best equipped to answer their question, which is exactly what this decision engine does.
5. Comstice CTI Router returns a RouteSelect message naming the destination — usually a target VDN, sometimes a specific skill, sometimes a direct agent extension — and can attach UUI for screen-pop downstream.
6. The vector continues; CM queues the call to the chosen skill or sends it to the destination VDN, which has its own queue-to-skill vector.

AES Services Comstice CTI Router Uses

Comstice CTI Router uses these AES services:

1. TSAPI: This is the Telephony Services API, Avaya's CSTA Phase III implementation. Comstice CTI Router opens a TSAPI client session against a TLink (the AES-side identifier for a switch connection) and uses it for:
- Receiving Route Request events from CM's adjunct-routing vector step
- Sending Route Select responses back to CM
- Monitoring VDNs, skills (hunt groups), stations, and agent login IDs for call/agent state events
- Third-party call control (make-call, transfer, conference, deflect, hold/retrieve)

2. DMCC (Device, Media and Call Control). Used primarily for the agent desktop side — registering virtual softphones for first-party control, screen pops, click-to-dial, and in some deployments call recording. In compliance testing the Device Manager component of Comstice CTI Router integrates with Avaya AES for screen pop and call control.

Avaya Configurations Required

On Avaya CM:

- display system-parameters customer-options – verify "Computer Telephony Adjunct Links" is y, and that you have enough Adjunct Routes licensed. Adjunct Route (CM 5.1 and later) and Increased Adjunct Routes are licensed features tied to the ASAI All Features capability on CM R6 and later.
- change ip-services – enable the AESVCS service with the AES server and a password.
- add cti-link <n> – type ADJ-IP, assign an extension. Add a CTI link using the add cti-link command with an available CTI link number, an available extension number, ADJ-IP in the Type field, and a descriptive name.
- change vector <n> – add the adjunct routing link <n> step plus a wait step and a fallback queue-to step.
- VDNs measured for Comstice CTI Router must have their reporting flags set appropriately if you're also feeding CMS.

On Avaya AES:

- Switch Connection configured to the CM with the matching passwd and IP.
- add tsapi-link referencing the CTI link number from CM. The TSAPI Link's Switch Connection is selected from the drop-down and the Switch CTI Link Number matches the CM CTI link, with an applicable advanced switch license such as AES ADVANCED LARGE.
- TSAPI service running; verify with status aesvcs cti-link on CM – confirm that **Service State: established** and **Mnt Busy: no**.
- A CTI user for Comstice CTI Router under User Management → User Admin. Enter desired values for User Id, Common Name, Surname, User Password; for CTI User, select Yes from the drop-down list.
- Security Database (SDB): either disable SDB or, in production, explicitly authorize the Comstice CTI user to control/monitor the relevant VDNs, skills, stations, and agent IDs. Please grant "Unrestricted Access", otherwise route requests will fail with permission errors.
- In the AES webpage, select Security > Security Database > Tlinks and the list of Tlinks appears in the Tlink Name column. Retrieve the exact TLink string (e.g., AVAYA#CM01#CSTA#AES01).