



Operata

Service Description

CCaaS v1.6



Contents

Service Description	1
Contents	2
Document Purpose	3
1. Platform description	3
1.1. Operata elements	3
1.2. Operata Capabilities	4
2. Monitoring	5
1.3. AWS Integration	5
1.4. Privacy Controls	5
1.5. Insights	5
2. Workflows	6
3. Agent	6
3.1. Operata Collector for Chrome & Edge	6
3.2. Data Network performance	7
3.3. Agent Environment	8
3.4. Agent issue reporting	8
3.5. Agent issue notification	8
3.6. Agent and Customer insights	8
4. Assurance	9
4.1. Assurance - CX Heartbeat	9
4.2. Assurance - Virtual Agent	9
4.3. Performance Testing	9
5. Integrations	10
5.1. API	10
5.2. Data Exchange	10



Document Purpose

The purpose of this document is to summarise the Service provided by Operata for CCaaS based contact centers, including the data collection points and Operata Platform features.

What is Operata

Operata is building the world's first CX Observability platform for Cloud Contact Centers.

Their mission is to put 'people experience' at the heart of communications.

Operata's platform measures, optimizes and maintains communication performance to deliver the best customer (CX) and agent experiences (AX). By capturing metrics, logs, and traces across technical, operational, and experiential data, Operata uncovers valuable insights from billions of agent interactions. IT teams rely on Operata to reduce Mean Time to Resolution (MTTR) and improve service delivery, while contact center teams leverage it to drive efficiencies and enhance key operational metrics.

Headquartered in Denver, Colorado, and Melbourne, Australia, Operata operates across sectors serving leading organizations including Pfizer, Centene, Barclays, 3M, Adobe, and the US Social Security Administration.

Operata continuously measures performance, bringing multiple data sources together to provide correlated insights needed to deliver the best possible customer experience, focused improvements, service provider management, and cost optimization.

To achieve this, the Operata Platform captures performance and event data from your CCaaS instance to the agent's headset and everything in between.

The Operata Platform is provided under a Software-as-a-Service (SaaS) model and is available wherever CCaaS is hosted for agents globally. Operata is available for CCaaS or services embedding CCaaS such as Salesforce Service Cloud Voice or ServiceNow Cloud Call Center.

Operata is built on and deployed to Amazon Web Services cloud infrastructure. All service elements are supported and maintained by Operata, including the software collectors.

1. Platform description

Operata continuously measures performance, bringing multiple data sources together to provide correlated insights needed to deliver the best possible customer experience, focused improvements, service provider management, and cost optimization.

To achieve this, the Operata Platform captures performance and event data from your CCaaS instance to the agent's headset and everything in between.

The Operata Platform is provided under a Software-as-a-Service (SaaS) model and is available wherever CCaaS is hosted for agents globally. Operata is available for CCaaS or services embedding CCaaS such as Salesforce Service Cloud Voice or ServiceNow Cloud Call Center.

Operata is built on and deployed to Amazon Web Services cloud infrastructure. All service elements are supported and maintained by Operata, including the software collectors.



1.1. Operata elements

There are four key platform elements that form our SaaS product:

1. Operata Platform

1. Dashboards and playbooks for end-to-end observability, aligned to the user types.
2. An open API for leveraging Operata data in third party tools.
3. Event-based data exchange via EventBridge for deeper integration into BI, IT Ticketing, and CCaaS tools.
4. Messaging ops integrations using WebHook, Email, and EventBridge, as well as native support for Slack.

2. Agent Collector - deployed as a simple browser collector

1. Agent messenger that enables agents to report issues to notify faults
2. Data collection

3. AWS Assurance - end-to-end agent endpoint and performance testing

1. Create load-test campaigns to deliver real calls into your CCaaS environment. (Simulate)
2. Orchestrator element within your AWS environment to coordinate non-subjective automated voice quality and latency tests to any agent endpoint. (CX Heartbeat)

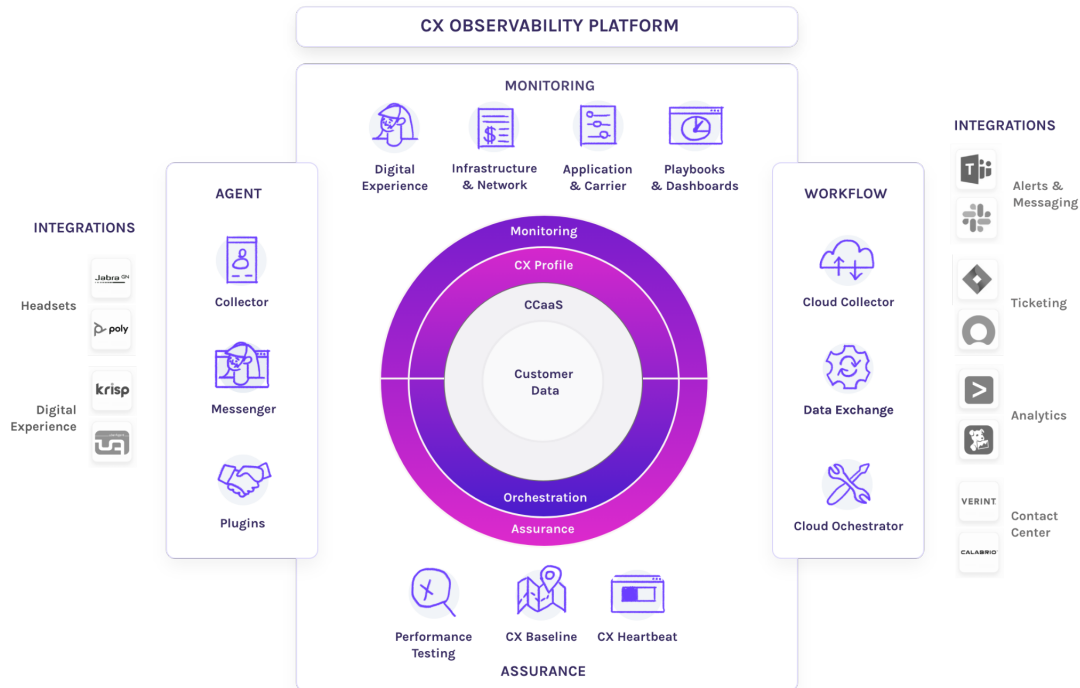
4. AWS Integration - deployed using AWS CloudFormation templates

1. CTR (Contact Trace Records) data collection using EventBridge pipes with Lambda function for Privacy Controls.
2. Contact Lens real-time and post-call analytics using EventBridge pipes and Lambda function.



1.2. Operata Capabilities

Operata capabilities can be categorized into five areas, all of which combine to provide the detail, notifications, and **Insights** needed for end-to-end management of an CCaaS based contact center service:



1. **Monitoring** - Continuous end-to-end performance measurement for real interactions.
2. **Workflow** - Events and notifications triggered when customer defined thresholds are reached.
3. **Agent** - Browser extension-based data collector and agent messenger.
4. **Assurance** - Baseline and test to support migration and during live operation.
5. **Integrations** - Expose insights to third party applications and CCaaS.

Data collection in multiple areas is essential to understand the end-to-end performance of a CCaaS service.

Operata **Monitoring** captures the performance of both the agent environment and contacts within CCaaS.

Operata **Assurance** orchestrates testing across the environment to capture the results of test calls, both under load (Performance Testing) and non-subjective audio quality (CX Heartbeat)



2. Monitoring

Operata continuously collects data from every second of every call for every agent. Data collection begins once a call is answered by CCaaS, and continues through to call termination. Operata correlates this data to provide an end-to-end view of every call.

A near real-time display of call quality can be viewed on a timeline, with a granularity from minutes to years and the ability to drill into time slices as required for review or incident investigation.

Calls can be dynamically filtered into agent country, geographic region, network quality, network type, agent's ISP, and much more. This allows support teams to easily identify trends or target areas for improvement.

Operata's approach also enables measurement of key metrics of the individual services powering the contact center; these key metrics are used to direct issues to the accountable area, from internal teams, 3rd parties, agents, and CCaaS.

1.3. AWS Integration

Operata's monitoring tools provide you with the visibility required to understand what is happening within CCaaS and their carrier services.

Operata surfaces logs and events within CCaaS that enable you to add contextual data to the summary call details (Contact Trace Records)

Operata AWS integration is deployed using AWS CloudFormation templates to create EventBridge pipes and Lambda functions that detect and push data to Operata, with customer-configured privacy controls to limit the data as required.

- Contact Trace Records (CTR) collection - details can be found [here](#)
- Contact Lens real-time and post-call analytics - details can be found [here](#).

1.4. Privacy Controls

Contact Trace Records (CTR) collected by the Operata Orchestrator can contain sensitive data or personally identifiable information (PII).

Customers may choose to limit the data sent to Operata using the Privacy Controls feature.

Details of how to configure Privacy Controls can be found [here](#).

1.5. Insights

Operata collates information from multiple sources, for millions of call minutes, harmonizing technical, operations, and experience data to deliver actionable CX insights.

Insights surface suggested issues, manage service level agreements, focus improvement efforts, and target cost reduction initiatives.

Agent and customer insights are surfaced in a series of Playbooks that provide IT and Operational teams with unique views into key metrics impacting customer experience and cost.



Correlating technical, operations, and experience data across multiple calls and operational lenses provides a unified view of interactions, highlighting opportunities to enhance operational efficiency and boost customer satisfaction.

Bringing this data together builds awareness in the technology and human elements that make up your contact center experience, with real-time observability giving the confidence to experiment, learn, and achieve shared goals.

Agent insights

Operata's agent insights provide a deeper understanding of how agents interact with your customers.

The Agent Insights playbook gives a complete picture of agent behaviour, capturing traditional agent measures such as Average Handling Time (AHT) as well as CX insights such as mute and hold durations, both during calls and when they end.

This provides the data needed for focused agent training and performance management with simple views showing a raft of engagement measures ranked against peers and business process cohorts.

Customer insights

Operata's customer Insights capture the customer journey through your contact center environment.

The Customer Insights playbook provides all the detail needed to optimize IVR options, consolidate skill groups, and reduce call transfers to improve first call resolution, reduce call handling times, and lower costs.

Track the time customers and agents spend fulfilling customer needs, ranking each interaction against cohort averages, and taking best practice baselines as the target to raise the bar for all interactions.

Capture customer and agent activities from customer-first contact with details on transfers, redials, and callbacks. Having a timeline view of related interactions brings focus to fix First Contact initiatives, improving CX and lowering cost.

2. Workflows

Operata has a user configurable workflow module which acts on performance triggers or agent reported issues to send email, Slack, EventBridge, or WebHook notifications.

3. Agent

3.1. Operata Collector for Chrome & Edge

The Operata Collector for Chrome and Edge is a browser extension that runs inside the browser hosting the CCaaS softphone (CCP, or embedded CCaaS softphone) used by the agents.

The Softphone Collector supports any CCP deployment method, including native CCP, custom softphone, thin-client delivery, and where CCP is embedded into third party services like Salesforce (Service Cloud Voice) and ServiceNow (Cloud Call Center).



The Operata browser extension is available from both the Chrome Store and Microsoft Edge Add-ons store, and can be deployed directly from the store or hosted using enterprise tools.

The Operata Collector provides both the Agent Messenger and Agent Environment data collection functions.

The Softphone Collector does not collect raw call data; instead, it posts encrypted technical performance metadata from the agent's desktop to the Operata platform.

When the agent takes or makes a call, network performance data is collected for every second and posted to Operata every 30-seconds. Data collection and transmission has been optimized to reduce the impact on the agent's PC and the network sending data to Operata.

3.2. Data Network performance

Capturing and understanding network performance and WebRTC metrics is critical to the performance of your call center.

Operata utilizes each agent as a “network probe” to record the network performance throughout your organization.

This approach provides awareness of both network performance (jitter, packet loss, latency and synthetic MOS) and configuration of each agent's IP Address, external WAN IP address, and ISP provider name.

MOS (Mean Opinion Score) is an industry-standard calculation that estimates voice quality for measured network performance.

The performance of the data network connecting agents to the CCaaS environment is important from both voice quality and softphone performance perspectives.

Operata captures five parameters of network performance for every second of every call:

- Latency/Round Trip Time (RTT) - how many milliseconds do data packets take to get to and from the agent - Target: < 250 ms.
- Inbound and Outbound Packet loss - the percentages of inbound and outbound packets lost - Target: < 1%.
- Inbound and Outbound Jitter - how many milliseconds data arrived out of the order in which it was sent - Target < 30 ms.

The three inbound parameters are used to calculate the displayed MOS scores in Operata Canvas, using the ITU-T G.107 standard, which indicates the likely voice quality.

As importantly, MOS Score indicates where network performance could have an impact on the performance of softphone features and its connectivity.

Operata Playbooks display both the Average MOS and worst-case MOS (the lowest MOS for any one second of the call).



Note: The MOS scores for periods calls are placed on hold are ignored, as the AWS agent announcement source introduces high levels of latency that do not represent actual network performance.

Operata Playbooks display the underlying Latency, inbound/outbound Packet Loss and inbound/outbound Jitter) - both Average and Worst Case (for any one second)

The underlying inbound and outbound network performance scores are particularly useful as a guide to the likely impact and resolution.

Critically, home-working networks are typically asynchronous, with outbound performance being far slower than inbound; knowing the network performance in both directions is very important.

3.3. Agent Environment

Operata continuously collects data from the agent's environment.

At a physical level, details on their PC Specification, CPU, and Memory usage are captured whenever agents make or take a call.

Details of the device used for both audio input (mic) and output (speaker) are captured with the audio energy levels received by the softphone from both the agent and the customer.

Should the Jabra Headset performance module be enabled, then details of audio levels, headset version, background noise, and peak audio exposure are also captured.

At an application level, details of the agent's browser version, softphone type, softphone state, softphone errors, and CCP log files all are captured with any associated CCaaS callContactId.

3.4. Agent issue reporting

Via the browser plugin, agents can report feedback on softphone failures, issues answering calls, issues while on a call (one way conversation, call disconnection, etc.), or call quality issues.

As Operata collects data from every call, IT teams can retrieve all relevant information from a call without any interruption of the agent. Call details can be retrieved near real time or historically.

3.5. Agent issue notification

The agent experience browser plugin can also be configured to notify agents of issues with network performance, PC performance, and headset sharing permissions, where Operata Platform detects that configured thresholds have been exceeded.

3.6. Agent and Customer insights

Agent actions and customer interactions are captured in real-time. Collation of this activity information with technical performance data provides unique insights into both agent and customer behavior.



4. Assurance

Operata assurance capabilities provide both confidence during migration to CCaaS and early indication of issues once in production. Operata provides two types of assurance testing:

- **CX Heartbeat** - continually tests the end-to-end environment, from your inbound service provider to your agent's location (or an Operata Virtual Agent) and everything in-between.
- **Performance Testing** - provides on-demand load testing of the CCaaS environment.

4.1. Assurance - CX Heartbeat

CX Heartbeat provides continual assurance of your end-to-end CCaaS service, from the carrier providing the customer contact numbers all the way to the network performance at the agent location.

Multiple CX Heartbeat tests can be scheduled concurrently to independently test each element in CCaaS and its supporting services.

Operata utilizes non-AWS global service providers to generate real-calls at regular intervals following the same delivery method as normal customer calls.

These CX Heartbeat calls are routed to your CCaaS region and answered by an Operata CX Heartbeat contact flow, before being answered by either an Operata Virtual Agent created within your sites, or any real agent.

Once answered, an orchestration process simulates a customer to agent conversation, playing and recording test audio files across the environment, and then uploading them for analysis.

Audio quality POLQA scores and real audio latency scores are provided for different points across the environment and are uploaded to Operata Platform with the associated network, WebRTC and softphone measures.

Details of the CX Heartbeat deployment can be found [here](#).

4.2. Assurance - Virtual Agent

The Operata Virtual Agent is an Operata software container deployed within the AWS region hosting your agents.

The Operata CX Heartbeat assurance tool uses the Virtual Agent to measure true audio performance and latency up to the CCaaS environment. This provides a clear measure on which to base end-to-end performance to the agent.

Details of the Virtual Agent deployment can be found [here](#).

4.3. Performance Testing

Pre-migration testing at scale is needed to prove that your CCaaS service quotas have been raised to the required levels, contact flows work, any Lambda integrations are



performant, and to give confidence that other CCaaS services can scale to expected peak concurrent call volumes and beyond.

Post-migration testing is needed to help identify issues, test changes, and prove BCP plans.

The Operata Performance Testing module (Simulate) has a wizard-based UI to create inbound call campaigns on demand. Campaign parameters are retained to re-run tests, with tagging to identify each run cycle. Operata Platform identifies where the test parameters grow to a size requiring Amazon approval and leads users through a structured notification process.

A non-AWS service provider is used for the generation of thousands of real calls, at high calls-per-second rates, into the CCaaS inbound phone numbers, which are then answered by Amazon Contact Flows.

Complex DTMF (tone) digit entry or speech prompts to test multiple customer account numbers can be uploaded via CSV into the inbound campaign.

Campaign performance is displayed in real time, identifying calls that were successfully answered or failed with a reason; Busy, No Answer, Failed in the Carrier, or were Ended Prematurely.

Once the campaign has completed, the results and recordings for each call can be accessed and exported.

5. Integrations

Operata is not designed to be a “walled garden”; instead, we have an open approach to data and working with the tools and services you utilize within your business today.

5.1. API

Operata’s REST API provides access to all collected data and insights. The API is accessed using authenticated API ‘GET’ requests and an API token generated within the Operata user interface.

Details on how to use the Operata API can be found [here](#).

5.2. Data Exchange

Operata allows integration with AWS EventBridge to enable Operata data to be delivered to your log management, APM, and BI tools.

Every event and call will be enriched by Operata and sent via AWS EventBridge.

Details on how to configure EventBridge can be found [here](#).