Universal Contact Service Private Edition Guide

Architecture

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Learn about Universal Contact Service architecture

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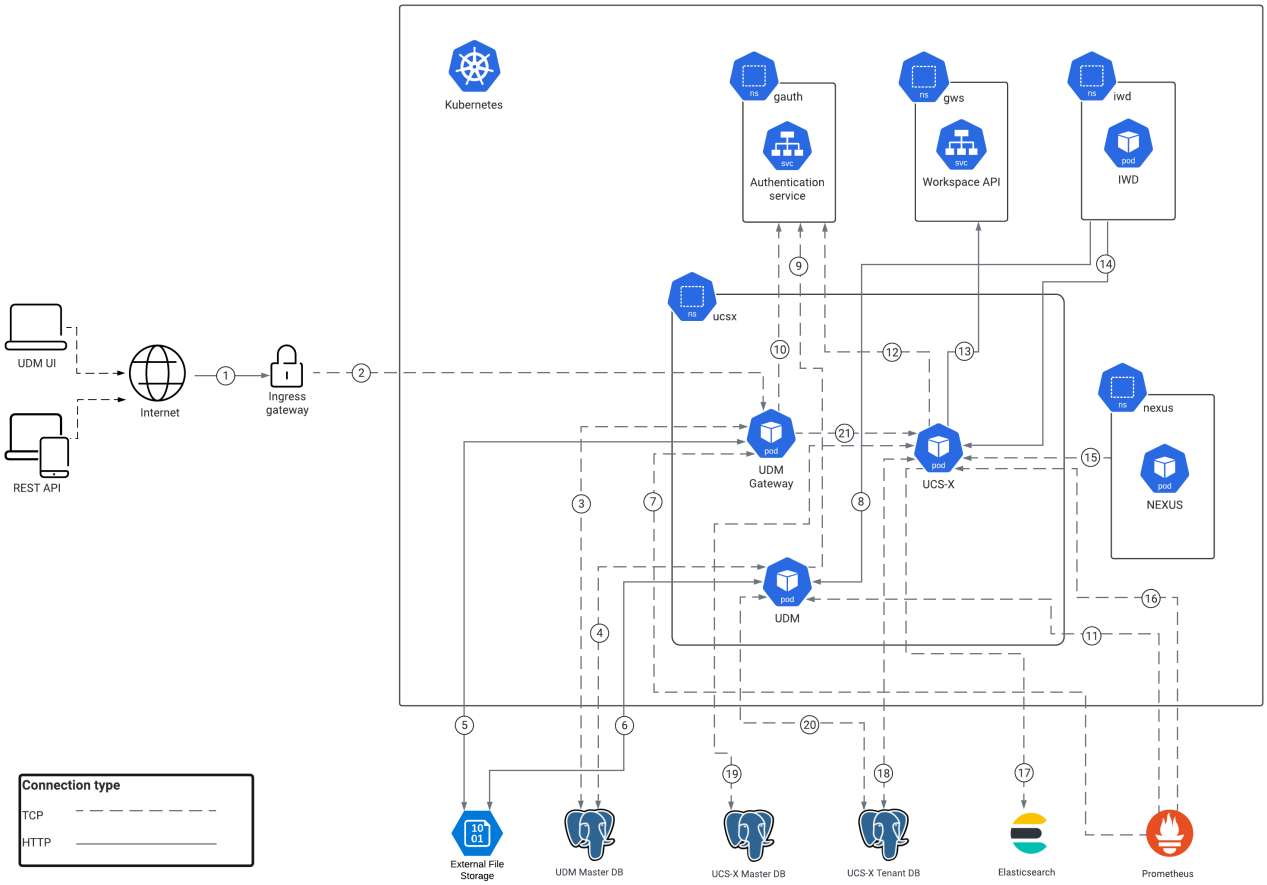
Introduction

For information about the overall architecture of Genesys Multicloud CX private edition, see the high-level Architecture page.

See also High availability and disaster recovery for information about high availability/disaster recovery architecture.

Architecture diagram — Connections

The numbers on the connection lines refer to the connection numbers in the table that follows the diagram. The direction of the arrows indicates where the connection is initiated (the source) and where an initiated connection connects to (the destination), from the point of view of Universal Contact Service as a service in the network.



Connections table

The connection numbers refer to the numbers on the connection lines in the diagram. The **Source**, **Destination**, and **Connection Classification** columns in the table relate to the direction of the arrows in the Connections diagram above: The source is where the connection is initiated, and the destination is where an initiated connection connects to, from the point of view of Universal Contact Service as a service in the network. *Egress* means the Universal Contact Service service is the source, and *Ingress* means the Universal Contact Service service is the destination. *Intra-cluster* means the connection is between services in the cluster.

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
1	Browser	Inbound Gateway	HTTP	80	Ingress	Inbound web traffic
2	Ingress Gateway	UDM Gateway	TCP	80	Ingress	Inbound web traffic

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
3	UDM Gateway	UDM Master DB	TCP	5432	Intra-cluster	UDM Gateway reads information about the jobs from the UDM Master DB.
4	UDM	UDM Master DB	TCP	443	Intra-cluster	UDM reads information about the jobs from the UDM Master DB.
5	UDM Gateway	External File Storage	HTTP	443	Intra-cluster	UDM Gateway uploads exported data to the External File Storage.
6	UDM	External File Storage	HTTP	443	Intra-cluster	UDM uploads exported data to the External File Storage.
7	Prometheus	UDM Gateway	TCP	10052	Intra-cluster	Prometheus polls UDM Gateway for metric endpoints.
8	Intelligent Workload Distribution	UDM	HTTP	8080		UDM exports iWD events using the iWD API.
9	UDM	Authentication Service	TCP	80	Intra-cluster	UDM connect to GAUTH for authenticating UDM clients.
10	UDM Gateway	Authentication Service	TCP	80	Intra-cluster	UDM Gatewat connects to GAUTH for authenticating UDM Gateway.
11	Prometheus	UDM	TCP	10052	Intra-cluster	Prometheus

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
						polls UDM for metric endpoints.
12	Universal Contact Service	Authentication Service	TCP	80	Intra-cluster	UCS connects to GAUTH for authenticating UCS-X clients.
13	Universal Contact Service	GWS Workspace Service	HTTP	80	Intra-cluster	Agent Workspace accesses UCS-X through the aggregator (GWS Workspace API). Internal ingress is used to support sticky session for CometD.
14	Intelligent Workload Distribution	Universal Contact Service	HTTP	80	Intra-cluster	iWD stores workitem interactions in UCS-X and iWD also reads contacts from UCS-X.
15	Nexus	Universal Contact Service	TCP	8080	Intra-cluster	Nexus access UCS-X API for storing and reading interactions (chat, socials) and contacts.
16	Prometheus	Universal Contact Service	TCP	10052		Prometheus polls UCS-X for metric endpoints.
17	Universal Contact Service	Elasticsearch	TCP	9200	Intra-cluster	UCS-X logs are passed to Elasticsearch.

Connection	Source	Destination	Protocol	Port	Classification	Data that travels on this connection
18	Universal Contact Service	UCSX Tenant Database	TCP	5432	Intra-cluster	UCS-X operations with tenant data (interactions, contacts, categories) are stored in Tenant database.
19	Universal Contact Service	UCSX Master Database	TCP	6432	Intra-cluster	UCS-X stores and accesses configuration data inside the UCS-X Master database: • fetch configuration on instance startup • periodically refresh configuration to get updates in runtime
20	UDM	UCSX Master Database	TCP	5432		UDM exports data from UCS-X Tenant database.
21	UDM Gateway	Universal Contact Service	TCP	443		UDM Gateway retrieves contact information for GDPR related jobs.