Architecture Review

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Customer

Two Orgs and two or more Secure Agents

Secure Agent Cluster license – Add multiple agents to a Secure Agent group.

Sandbox Org

Cloud Data Governance and Catalog

Cloud Data Quality

Cloud Data Integration

Production Org

Secure Agent Group
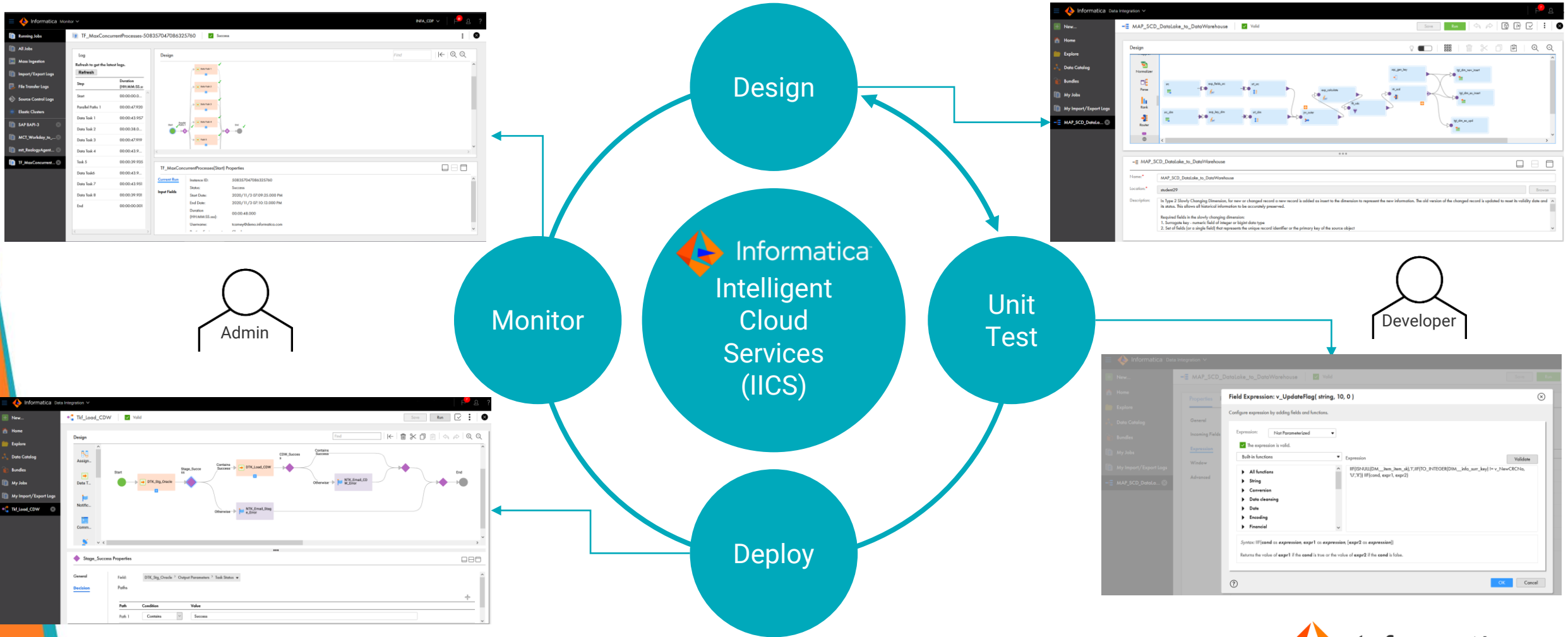

Cloud Data Governance and Catalog

Cloud Data Quality

Cloud Data Integration

| Secure Agent service	Description	Used by…	Mandatory/Optional
Common Integration Components	Runs the shell scripts or batch commands in a Command Task step of a taskflow.	Data Integration	CDQ
Data Integration Server	Runs data integration jobs such as mapping, task, and taskflow instances.	Data Profiling; Data Integration	CDQ/CDGC
Discovery Application Agent	Reads the staged profiling results on Data Integration (Data Integration execution engine) or cluster (Data Integration Elastic execution engine), and uploads the profiling results to Metadata Command Center.	Metadata Command Center	CDGC
Metadata Foundation Application	Extracts metadata from the configured source systems in your organization, and uploads the extracted metadata to Metadata Command Center through the Secure Agent.	Metadata Command Center	CDGC
GitRepoConnectApp	Manages communication between Informatica Intelligent Cloud Services and the source control repository when your organization uses an on-premises source control repository.	All Informatica Intelligent Cloud Services that use source control	CDQ -- Optional

Informatica

IDMC Interfaces

IICS provides all functionality in one unique web-based user interface

Design

Unit Test

Deploy

Monitor

Informatica
Intelligent Cloud Services (IICS)

Admin

Developer

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Intelligent Data Management Cloud (IDMC)
## Connectivity and Architecture
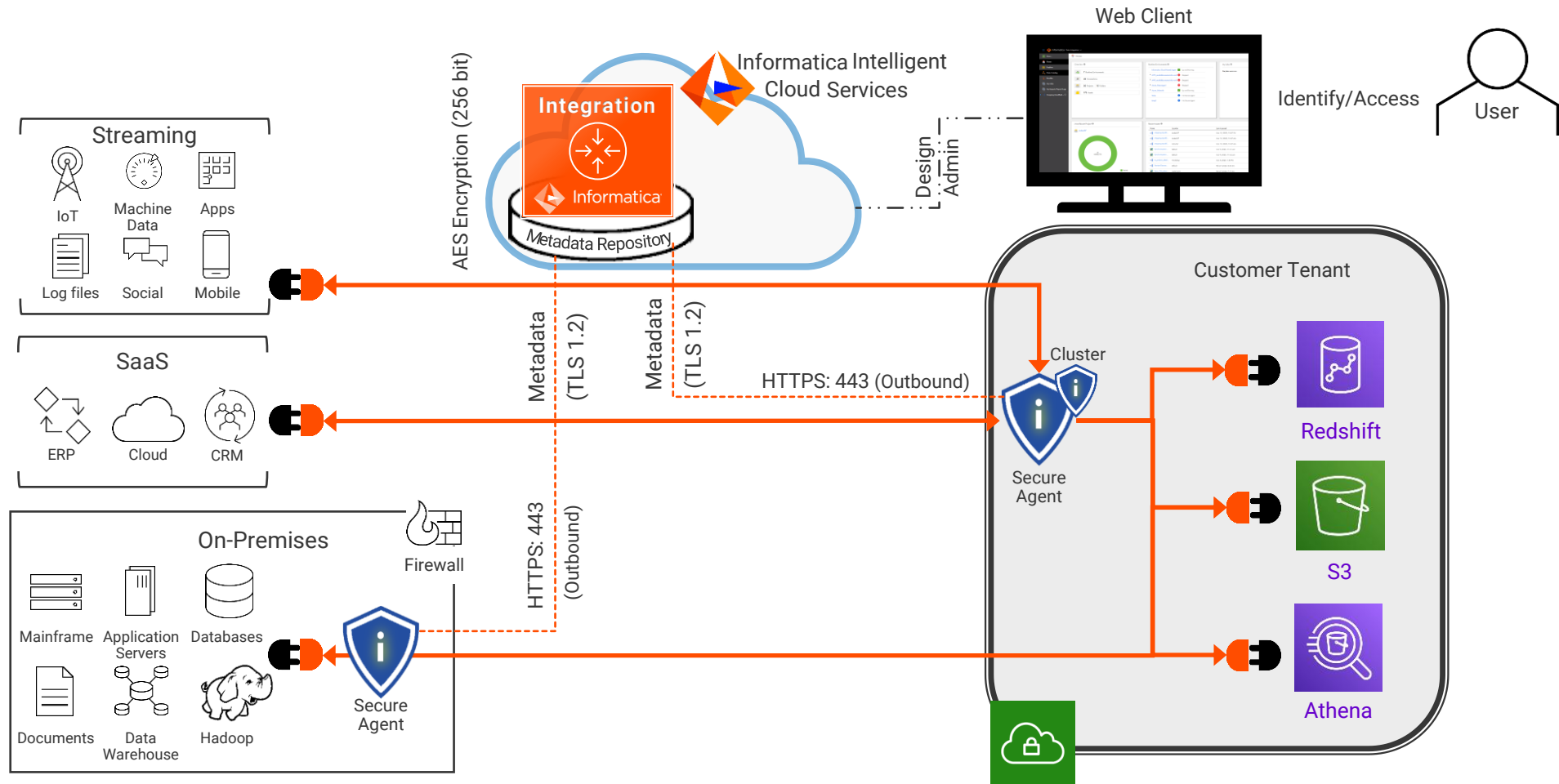
Intelligent Data Management Cloud (IDMC)

- Developers will connect to informatica Cloud URL to log into their ORG to build their logic

- INFA secure agents (which can be installed onprem or IaaS) will execute the logic pulling it from INFA cloud

- All connections are always outbound (from VPC to INFA cloud) through port 443 and secured/encrypted

- Secure agents can be grouped into clusters, allowing all data integration patterns (cloud to onprem, onprem to cloud, etc…)

- No thick clients are required (all interactions are web based)

- No repository is required (all metadata is stored in INFA cloud)

IDMC High Availability (HA) Architecture

SA LOGICAL GROUP

- Secure Agents (SA) are installed in different Azs (in the same region)

- Secure Agents are grouped under the same cluster (logical group)

- Integration Tasks are bound to a Logical Group for scalability

- Integration Tasks are assigned in a round-robin fashion when multiple agents are present in a secure agent group
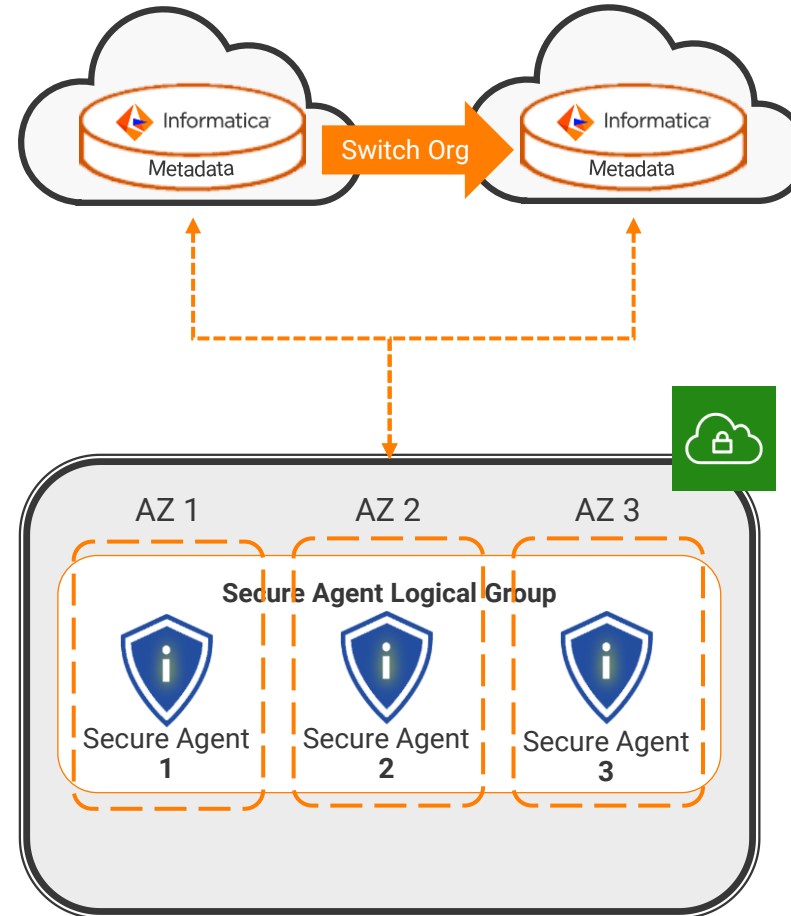
INFORMATICA ORG HA

- Allow customers to operate during planned downtimes or unplanned outages

- Dual Org setup across PODs allows for Organization IDs (ORG) High Availability

- Assets and states in sync across Active and Backup Orgs

- Automatic rerouting of inbound APIs to backup POD

IDMC Sizing Guidelines

Informatica IDMC Secure Agents sizing

Secure Agent	Input Vol Size	Load window	# Agents	CPU	RAM	Disk	EC2
Small	200 GB	8 hrs	1	4	16 GB	100 GB	m5.xlarge
Medium	500 GB	8 hrs	2	8 (2*4)	32 GB (2*16)	200 GB (2*100)	m5.xlarge
Large	1200 GB	8 hrs	4	16 (4*4)	64 GB (4*16)	400 GB (4*100)	m5.xlarge
X- Large	1800 GB	8 hrs	6	24 (6*4)	96 GB (6*16)	600 GB (6*100)	m5.xlarge

CPU, RAM and Disk are total for # of secure agents
i.e: for medium, 8cpu core (4 cpu core per agent)

- These numbers are representative for typical implementations, based on concurrent jobs running, amount of data to be processed, window to process data, etc…

- Secure Agents can be grouped under clusters to enable workload distribution

- Alternatively, you can also scale up vertically (adding more resources, and hence, using bigger machine templates)

- Secure Agents are installed on your infrastructure, but they are self-maintained. Updates are regularly pushed from Infa cloud

- Secure Agents are based on a microservices architecture where you can control which services are running at any time

- No repository database must be provided

IDMC Secure Agent installation Recommended

- SSD disks are strongly recommended

- Consider mapping the log and cache files to a different file system location to avoid a high disk usage or to archive the logs

- We recommend to have at least 3x the current space used by the Secure Agent installation just for the monthly release patches

- In a Linux base, do not install the Secure Agent using Root user. Create a specific user profile/group to install the Informatica Cloud Secure Agent with full access (chmod 700 - owner can read, write and execute or 777) to all folders from Secure Agent installation directory

- We recommend not to install a Secure Agent on a server which is already running PowerCenter or Informatica domain (resource issues, potential conflicts with variables) and if you do, use a different user account

Thank You