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# IICS secure agent 101

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# Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available to view on our **INFASupport YouTube channel** and **Success Portal**. The link will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

# Feature Rich Success Portal

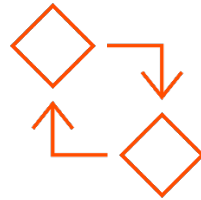
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Bootstrap trial and  
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Product Learning  
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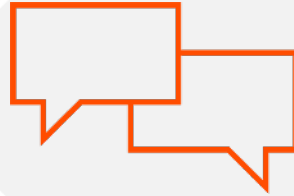
Tailored training and  
content  
recommendations

# More Information



## Success Portal

<https://success.informatica.com>



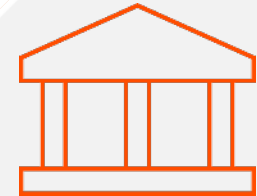
## Communities & Support

<https://network.informatica.com>



## Documentation

<https://docs.informatica.com>



## University

<https://www.informatica.com/in/services-and-training/informatica-university.html>

# Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.

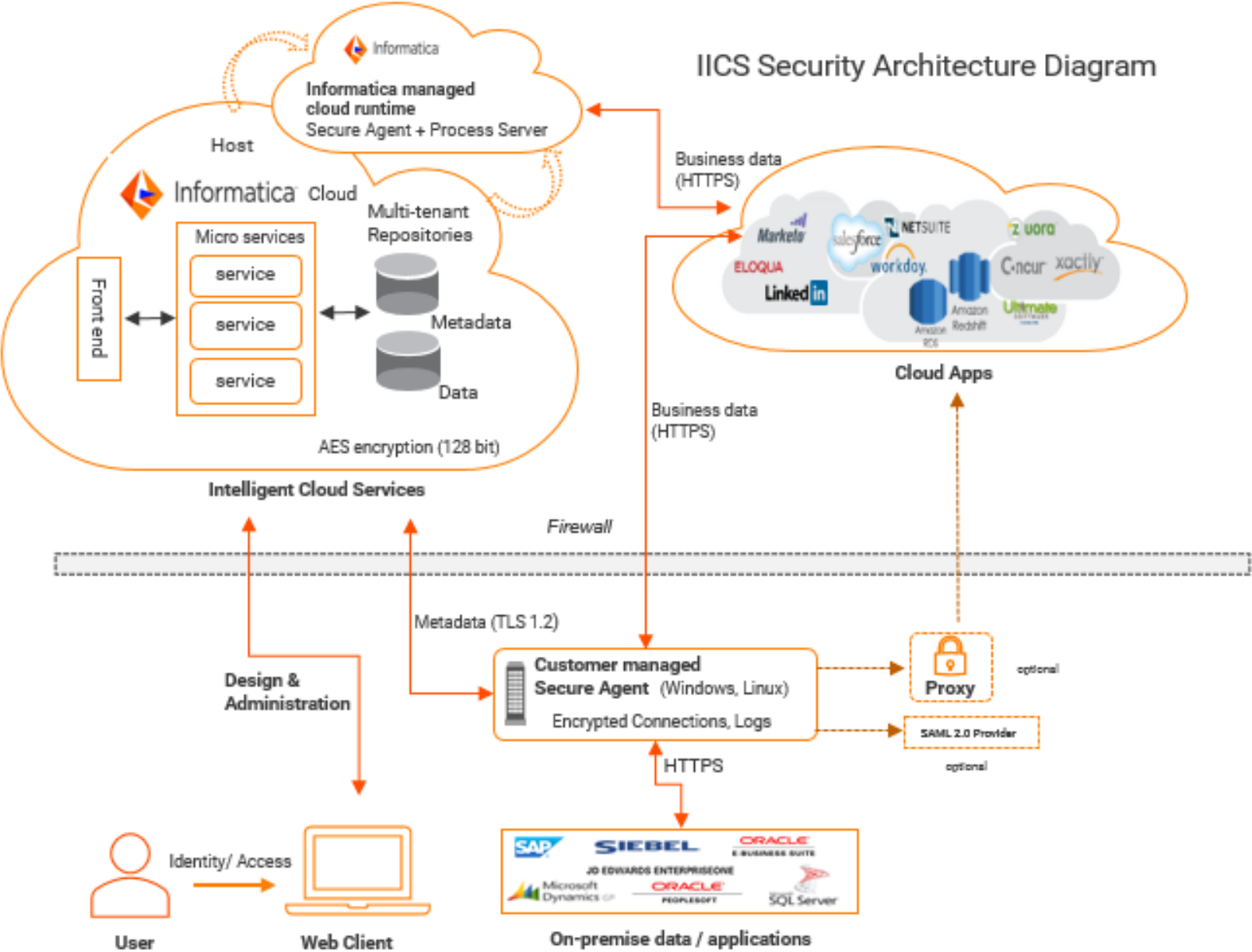
# Agenda

- What is IICS secure agent
- Minimum requirements for IICS Secure Agent
- Breakdown of agent services
- Service responsibilities
- Service startup routine
- Administration of services
- Upgrade sequence
- Log locations
- Demo (DIS)
- Q&A

# What is IICS secure agent

- The doc says – A lightweight program that runs tasks and collects metadata for Informatica Intelligent Cloud Services.
- It is an agent as a platform that
  - Enables secure communication between Informatica Intelligent Cloud Services and your organization
  - Hosts multiple services that you are licensed for.
  - Administers, orchestrates and updates itself and the services while maintaining runtime continuity
  - Most importantly runs your jobs

# IICS Security Architecture Diagram





# Minimum requirements for IICS Secure Agent

- 16 GB RAM.
- 250 GB disk space
- The Secure Agent uses the HTTPS port 443 for any outbound communication
- Whitelist all the IPs as required by IICS
- Setup proxy at installation
- Installation and execution to be performed as Administrator on Windows
- Visit whitepaper for a elaborate list.

<https://kb.informatica.com/whitepapers/4/pages/1/526096.aspx>

# Breakdown of agent service processes

- Agentcore
- Administrator
- Data Integration service (licensed)
- Other licensed services



# Service responsibilities

# AgentCore

- Very first process to start when agent startup is invoked
- Configures agent and associates with an org
- Establishes secure connection with Informatica Intelligent cloud services
- Manages upgrades
- Maintains application specification (appspec) for every application
- Downloads and deploys packages based on the appspec
- Governs(deploy, Start, Stop and poll) applications based on the appspec
- Syncs with IICS on application statuses
- Opens and manages secure channels with IICS on behalf of all the services

# More on Appspec

- Every licensed application has an appspec based on default setting and settings modified through IICS Administrator UI
- All the appspecs can be found at: <agent\_home>/apps/agentcore/data/
- Here are some important info present as part of appspec:
  - Application Name
  - Version of the Application Spec
  - Dependencies - list of packages to download.
  - Application start script file
  - Status – Application health/readiness check script/command
  - Stop – Application stop script/command
  - Replacement Policy – How to replace/update a running application

# Adminsitrator

- Gets the agent metrics – e.g: OS version, disk space, RAM
- Helps in fetching diagnostic information like logs

# Service startup routine

- All applications are governed by a specific component called LCM within Agentcore
- Reads appspec for a service
- Downloads all the dependent packages from IICS. This contains jars, libraries and executables.
- Deploys all these packages - Creates a specific version under `<Agent_home>/apps/<service_name>` and creates soft links to the downloaded binaries
- Invokes start script
- Waits for success return status
- Updates IICS of the current status

# Administration of services

- Services are monitored by agentcore through status scripts.
- Service is marked as running if status script returns zero/success
- Service is marked as failed if status script returns non-zero/failure
- The status is updated to IICS
- Agentcore polls for status changes coming from IICS as well
- Invokes stop script if there is a stop requested OR status return failure



# Runtime continuity during upgrade

- Packages are downloaded well in advance
- On upgrade day
  - New agent core is spawned and takes over administration of the agent
  - New DIS is spawned while the old DIS is still running
  - All new jobs are dispatched to new DIS
  - Old DIS exits after successfully completing already running jobs OR after 24 hours
- Upgrade completes once all the upgraded services are running and old services are down

# Log locations

- Audit logs: IICS console -> Administrator -> Logs
- On the agent machine:
  - <Agent\_home>/apps/agentcore/agentcore.log
  - Logs related to communication with IICS: <Agent\_home>/apps/agentcore/logs/tunnel\*
  - Logs related to Data Integration Server
  - <Agent\_home>/apps/Data\_Integration\_Server/<version>/tomcat.out
  - <Agent\_home>/apps/Data\_Integration\_Server/<version>/scripts.out
  - <Agent\_home>/apps/Data\_Integration\_Server/logs/tomcat/tomcat\_<version>.log
  - Job logs: <Agent\_home>/apps/Data\_Integration\_Server/logs/

# References

- Secure Agent minimum requirements: <https://kb.informatica.com/whitepapers/4/pages/1/526096.aspx>
- Archive logs: <https://kb.informatica.com/howto/6/Pages/20/519744.aspx>
- Setup up agent with proxy: <https://kb.informatica.com/howto/6/Pages/20/512361.aspx>
- Whitepaper on agent startup routine: <https://kb.informatica.com/whitepapers/4/Pages/1/613038.aspx>
- IP range to be whitelisted: <https://kb.informatica.com/faq/7/Pages/20/524982.aspx>
- PAM for agents: <https://network.informatica.com/docs/DOC-17579>

Questions?



# Thank You

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