

Connectivity Agent

- Acts as a gateway from on-premise to OIC.
- All communications are initiated by the Agent to the OIC but not vice versa.
- Connectivity agent communicates through port 443 (through firewall) since no ports are open at on-premise system, at times uses proxy to access internet.
- All communications is secured through SSL
- Agent posts regular heartbeat to OIC to signal that it is alive and this reflects as green health status on monitoring console
- Message Payload size supported is 10 MB
- Oracle certified Java JDK is required at on-premise system to run the agent
- 8 GB memory and 4 GB heap size is dedicated for the agent JVM
- Connectivity agent can be configured at High Availability mode as well.
- Verify agent logs to troubleshoot any kind of issues arises while using agent based communications
- Agent can be upgraded manually or automatically.



Architecture of Connectivity Agent

- Agent keeps polling for design time and runtime work that needs to be processed at on-premise
 - Design Time Work: Test Connection, Activation, Deactivation requests etc.
 - Run Time Work:
 - ✓ Processing invoke messages that needs to be sent to DB or private SOAP/REST Services etc. *if processing doesn't complete within 240 seconds then OIC Flow instance fails with time out error or any other fault received in due course.*
 - ✓ Send trigger messages to OIC

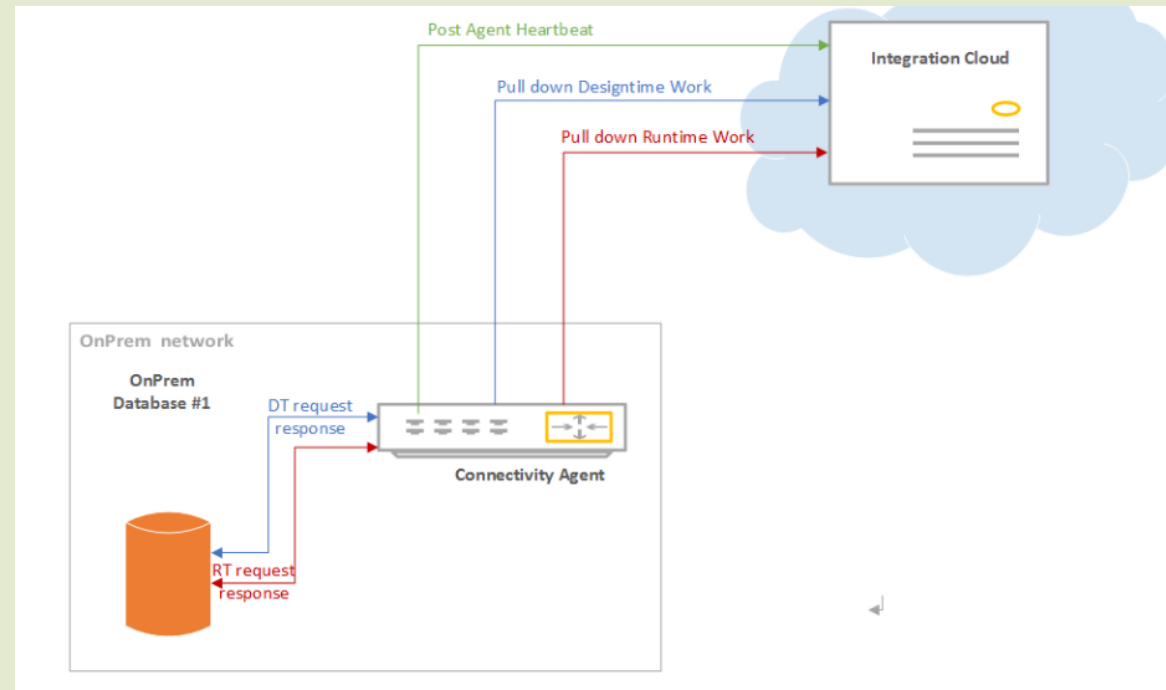


Image Source: <https://www.ateam-oracle.com/ics-agent-concepts-and-best-practices>

Working Principle of Connectivity Agent

Invoke Flow

- Agent keeps polling for the invoke messages
- Once received, a timer is set for 240s and by this agent should return response to OIC.
- If the processing takes more than 240s then it's better to design solution with async pattern. Could be Parking Lot Pattern.

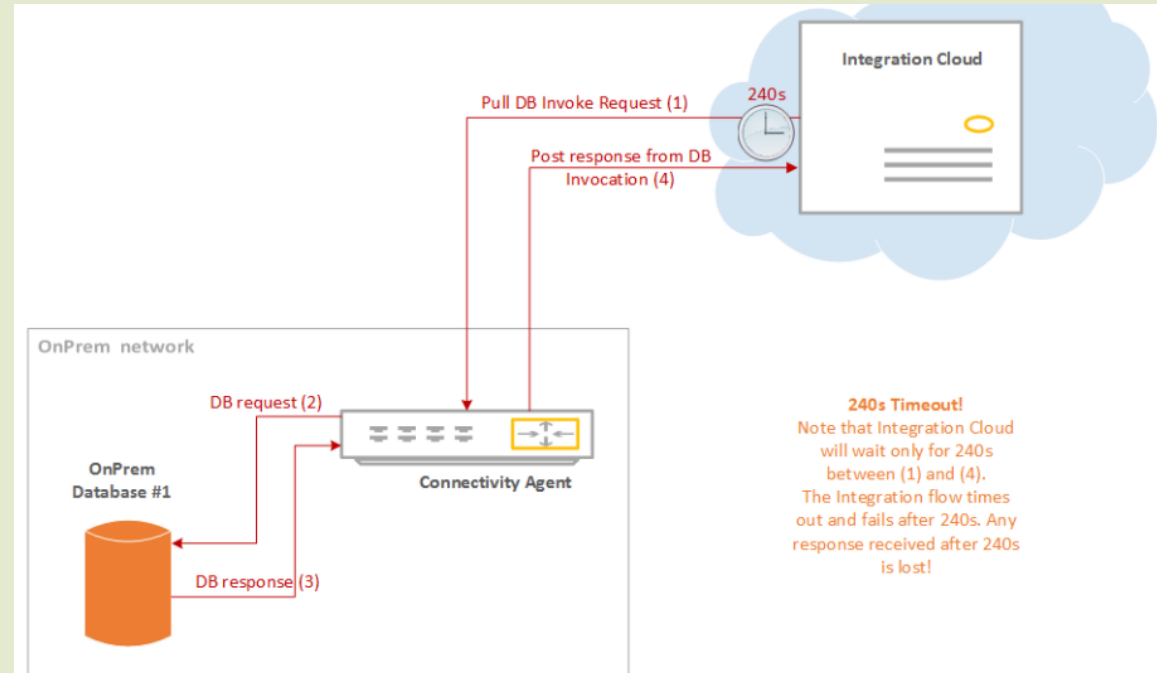


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Working Principle of Connectivity Agent

Trigger Flow

- Agent pushes the trigger messages to OIC
- Once the processing is done, agent polls for the message.

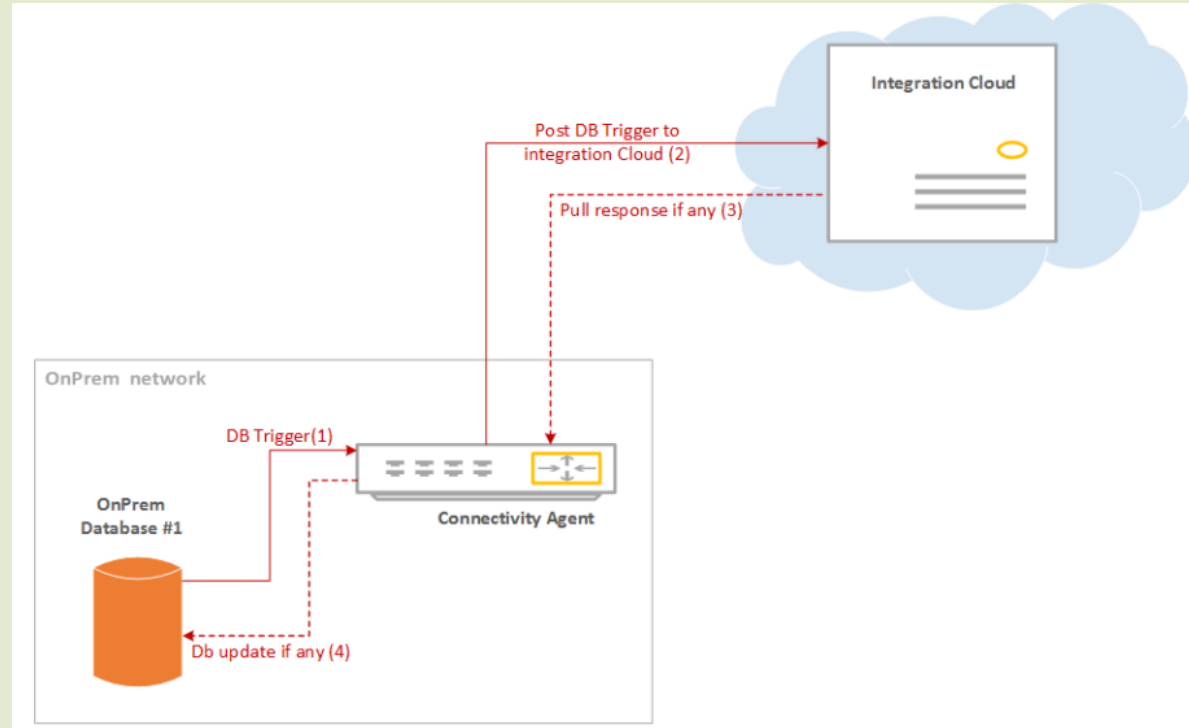


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Installation of Connectivity Agent

- Navigation to Integrations → Agents
- Create a Connectivity Agent Group. Let's say SAMPLE_AGENT
- Download Agent Software/ Zip.
- Create a directory in on-premise system(behind the firewall/ local system). Let's say OIC_AGENT
- Unzip the connectivity_agent.zip into OIC_AGENT
- Provide the following details in the InstallerProfile.cfg
 - ✓ oic_URL
 - ✓ agent_GROUP_IDENTIFIER
 - ✓ oic_USER [**Optional**]
 - ✓ oic_PASSWORD [**Optional**]
- Run the connectivity agent. (can be run as background job as well in production environment only in UNIX server)

```
java-jar connectivityagent.jar
```

