

La tua digital strategy.
Mille prospettive
di information management,
una Data Platform.

Irion Innovation Day 2019

Challenging the future

Giovanni Scavino – Chairman of the board

Irion EDM 2019 – Dove eravamo rimasti

Integrated Development Environment

Agile Development · Version Management & Compare · Dependencies Graph · Drag & Drop · Complete Documentation · Refactor · Multiuser · Reference Tracking · Intellisense · Enhanced UI (Ribbon) · SQL based

WFS · Workflow Server

Process Automation · Document Approval · Parallel & Distributed load · Visual Graphic Editor · Automatic Load Balancing

OneClick Audit™

- Trace & Verify Proc, Rules & Data
- AutoAdaptive
- AutoDoc
- Retention Pol.

Desktop viewer

- Reports · Charts · Grid · Dashboard · Tree and Diagram

Universal viewer

- Web & Desktop: · Grid, Form, ... Frame · Matrix, ...

Excel Add-in

Data Delivery

- File & RDBMS
- Mail
- SharePoint
- Web Services

WAS

- Web API Server
- Odata 4.0
- RESTful API
- CRUD

DAS

- Data API Server
- TDS,
- Data intensive

MPT

- Message Push Technology
- Channel def.
- Multicast Publish - Subscribe
- WorkQueue

WES · WPS

Web Execution Server

Logical Data Modeling · Book

Virtual Data Model & Enhanced Commands · Logical Lock Manager

Dynamic Rules Manager · Enabling Rules Catalog · Rules Extended Metadata · Rules Classification · Rules Approval & Lifecycle Mgmt · What-if User Lab

DataShelf™

- Generic Data Model
- Unit of Work Partitioning
- Dynamic Definition
- Metadata Management
- Multi Storage Area

Admin & SystemAut.

- Active Dir., LDAP
- Custom Auth.
- Users Group & Privileges
- Change mngmt automation

Natural Language Doc. Engine

- Multilanguage
- Bus. Glossary
- Semantic Management
- Generated in Real-time

Profiler Engine

- Column base & advanced Statistics
- Rapid Data Look for Designer
- Persistent Statistics & Trend in solutions

Rules Engines

- Validation, Transformation & Generation:
- Conditional Rules Engine,
- Query Engine,
- SQL Engine

Analytics Engine

- Descriptive statistics
- Machine Learning
- Clustering
- Regression
- R Engine
- Python Engine

Masking Engine

- Subst., random, peek, shuffle, custom
- Row & Table Coherence
- Referential Integrity
- Inverse mapping for drill down

External Sources Connectivity

RDBMS · Files · Mainframe Reports · Web Services · Hadoop · Third Party APIs · Excel · Others

Extended Metadata

custom metadata definition · Catalog & Package Examiner

Innovative & Unique Proprietary Technologies

IsolData™ V2 Isolated Dataspace · EAST™ Everything As a Table · DELT™ Declarative Extract, Load & Transform · OneClick WebAPI™



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Connectors suite – EasT everywhere...

External Sources Connectivity

[Per ulteriori informazioni](#)

EasT Everywhere

Demo

Connectors Suite



NOSQL



RDBMS

Plugin consegnabili separatamente dalla release senza necessità di upgrade.

Normalizzano tutte le modalità di interazione in SQL e supportano CRUD (Se la fonte dati lo permette)

Espongono tutti i dati sorgenti secondo un modello relazionale (EasT)



IoT Data



Device



Open Data



SaaS

Operano in Push-Down se possibile e integrano eventuali capacità mancanti

Espongono i Metadati (Tabelle, Colonne etc)

Gestiscono livelli di sicurezza di classe Enterprise (comunicazione su canali criptati TLS/SSL, Kerberos Authentication ...)



Cloud Apps



ERP/CRM



DS/ML Platforms

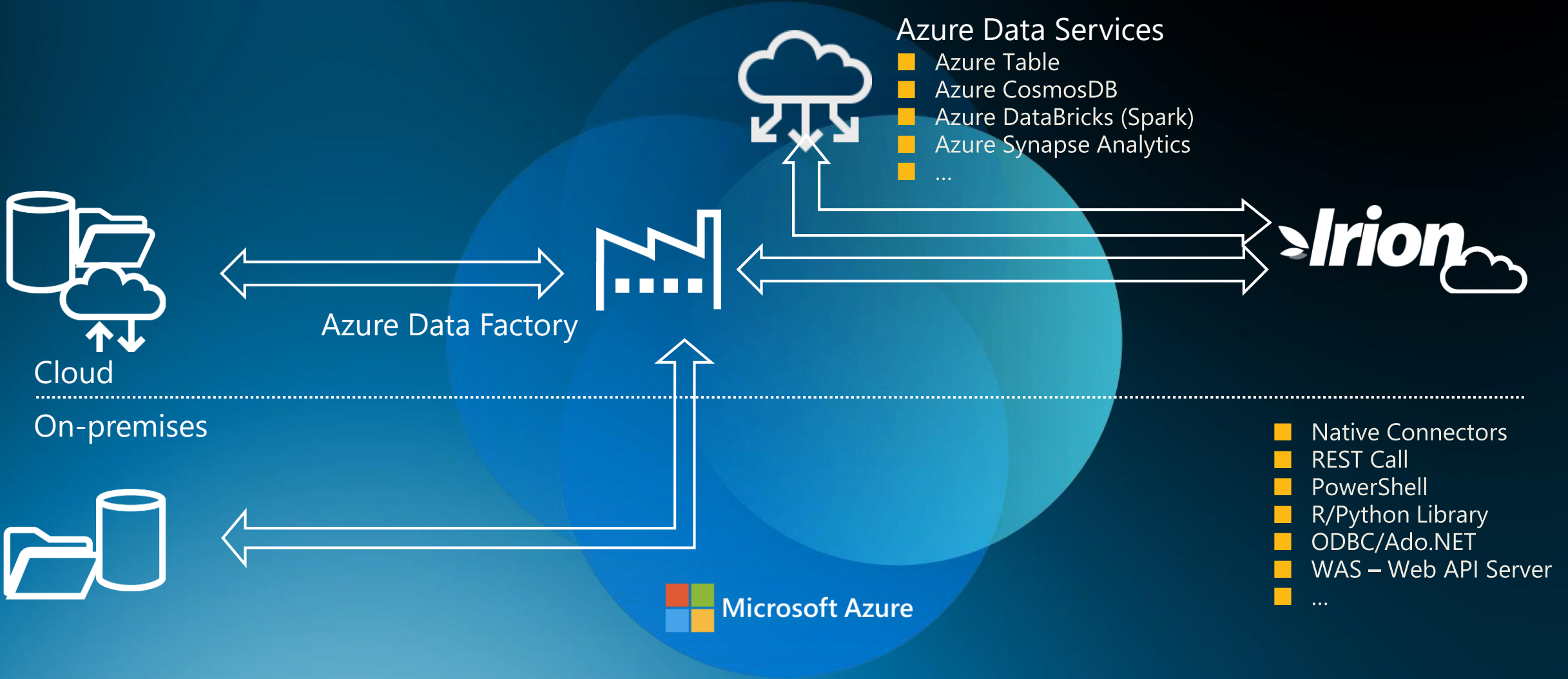


ABI Platforms



Analytics Apps

Irion runs on Azure



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External Sources Connectivity – Connectors suite



Extended Metadata

- custom metadata definition
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Source Code Management

Integrated Development Environment

Irion EDM 2016

- Sorgenti del package salvati in un unico blob criptato
- Import/export un unico file per deployment, archive, etc
- Versioni nel Catalog




Irion EDM 2019

- Sorgenti salvati separatamente in forma testuale (SQL, R, PowerShell, Python, JSON, XML ...)
- La contention fra i designer in sviluppo è considerevolmente ridotta e il sistema segnala eventuali incoerenze
- Import/export dei sorgenti in chiaro in cartelle annidate e file
- Esportando i sorgenti li si può editare con i classici strumenti di gestione dei progetti software (VSCode etc) nonché salvarli su repository esterni e centralizzati standard (i.e. Git, TFS, etc)

Roadmap

- «Designer Playground» e gestione change, branch, push, etc
- Gestione dei sorgenti in formato testuale con *Find/Replace* e *Diff/Merge* integrati con *l'edit&continue* nativo per lo sviluppo incrementale
- Integrazione del Repository Service con sistemi esterni di gestione dei sorgenti
- Ottimizzazione tempi di caricamento dei package

Irion EDM 2019 – Novità

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Nuovo **modello di autenticazione**

Admin & SystemAut.

Authentication as a Service:
implementazione certificata dei protocolli OpenId e Oauth 2.0





Single Sign-on sia da Desktop Client che da Web, che da API

Federation Gateway: supporta identity providers esterni come:

- Azure Active Directory
- Google
- Facebook
- ...

Personalizzabile per adeguarsi a modelli e protocolli specifici del cliente (Authentication Plug-in)

Irion EDM – Roadmap

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Natural Language Rules

Demo

Natural Language Rules

Irion EDM 2019

Show

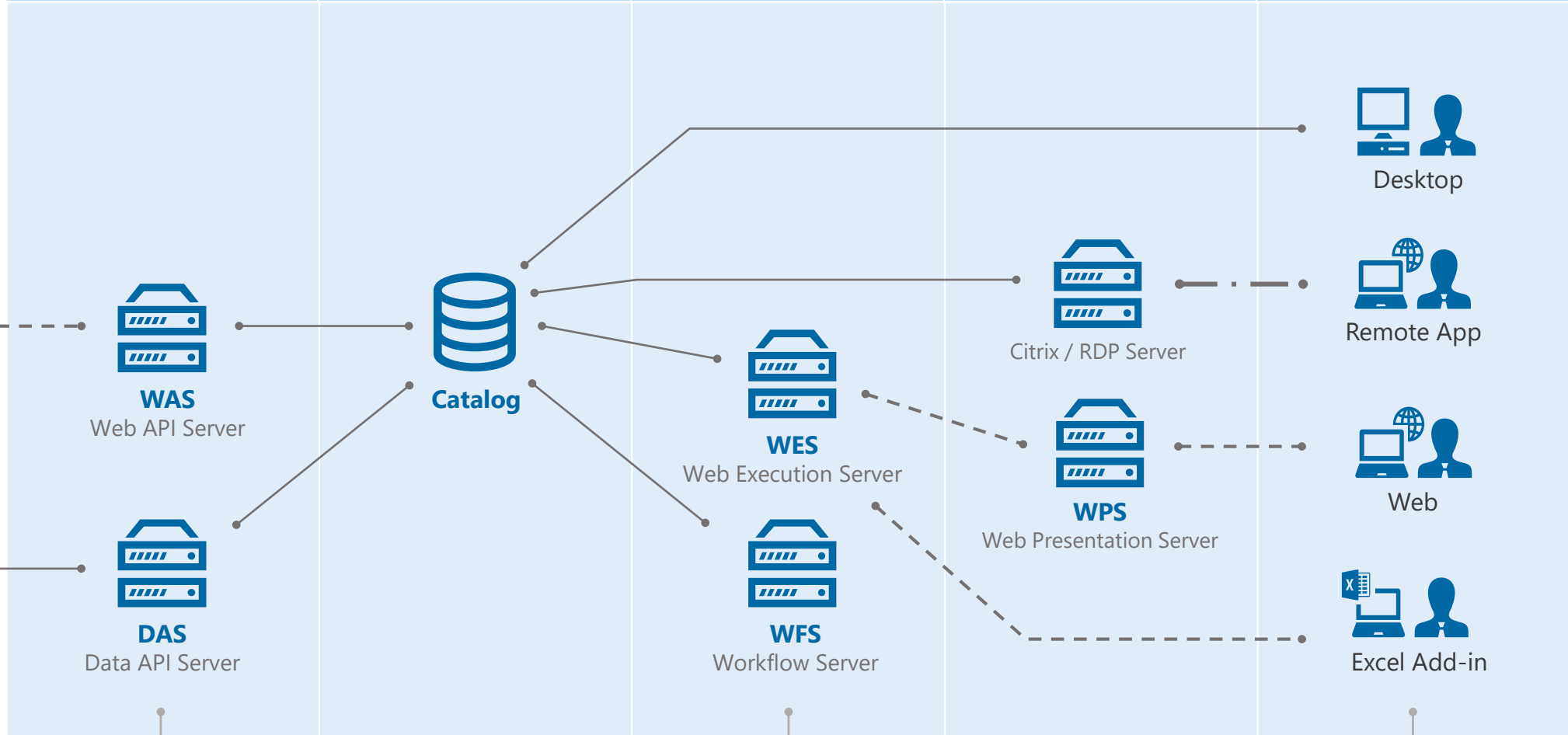
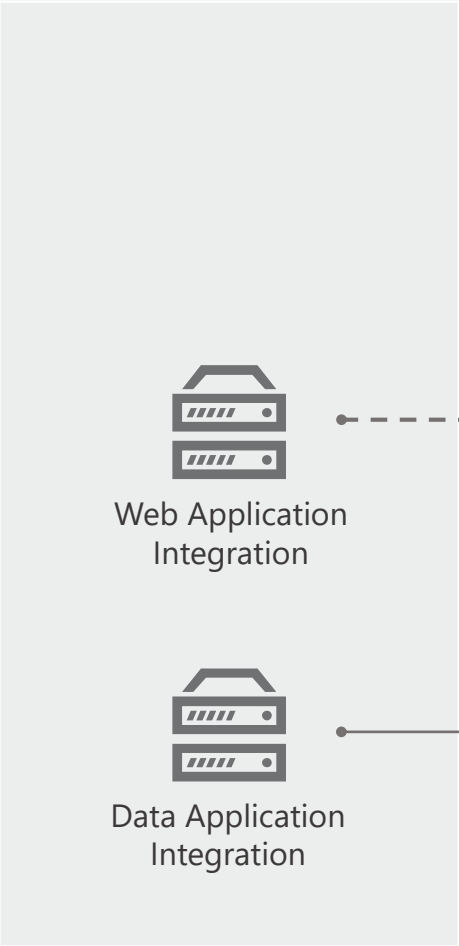
- Le regole definite in formato tecnico sono **un input** alla documentazione automatica
- Utilizza un Business Glossary e relativo language

Roadmap

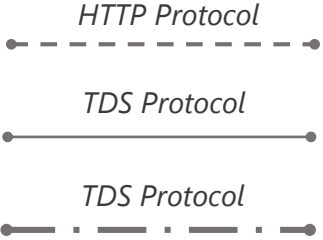
Show, **Edit & Run**

- le regole definite in formato tecnico sono **un output** prodotto automaticamente
- Utilizza lo stesso Business Glossary (eventualmente proveniente da un sistema di DG) e relativo language
- Le regole descritte sono «attive»
- Il business user è guidato e reso autonomo nella stesura delle regole in linguaggio naturale
- Se necessario è sempre possibile passare al modo «Advanced»

Irion EDM Architecture



Data Sources / Target



External Application

Integration Server Layer

Web Application Integration

Data Application Integration

Irion EDM Architecture

Integration Server Layer

Data Server Layer

Application Server Layer

Presentation Server Layer

User Layer

← SCALE OUT →

↑ SCALE UP ↑

← SCALE OUT →

← SCALE OUT →



WAS

Web API Server



DAS

Data API Server



Catalog



WES

Web Execution Server



WFS

Workflow Server



Citrix / RDP Server



WPS

Web Presentation Server



Desktop



Remote App



Web



Excel Add-in

Data Sources / Target



NOSQL



RDBMS



IoT Data



Device



Open Data



SaaS



Cloud Apps



ERP/CRM



DS/ML Platforms



ABI Platforms



Analytics Apps

HTTP Protocol

TDS Protocol

TDS Protocol

External Application

Integration Server Layer



Web Application
Integration



Data Application
Integration

Irion EDM Architecture

Integration Server Layer

Data Server Layer

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WAS
Web API Server



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Catalog



WES
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Desktop



Remote App



Web



Excel Add-in

HTTP Protocol



TDS Protocol



TDS Protocol



Data Sources / Target



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IoT Data



Device



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Analytics Apps

External Application

Integration Server Layer


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Integration



Data Application
Integration

Iron EDM Architecture Roadmap

Integration Server Layer

← SCALE OUT →


WAS
Web API Server


DAS
Data API Server

μservices Layer

Packages Repository
Service



DataShelf™
Storage Nodes



← SCALE OUT →

DELT™
Compute Nodes



← SCALE OUT →

Application Server Layer

← SCALE OUT →


WES
Web Execution Server


WFS
Workflow Server

Presentation Server Layer

← SCALE OUT →


Citrix / RDP Server


WPS
Web Presentation Server

User Layer



Desktop



Remote App



Web



Excel Add-in

Data Sources / Target



NOSQL



RDBMS



IoT Data



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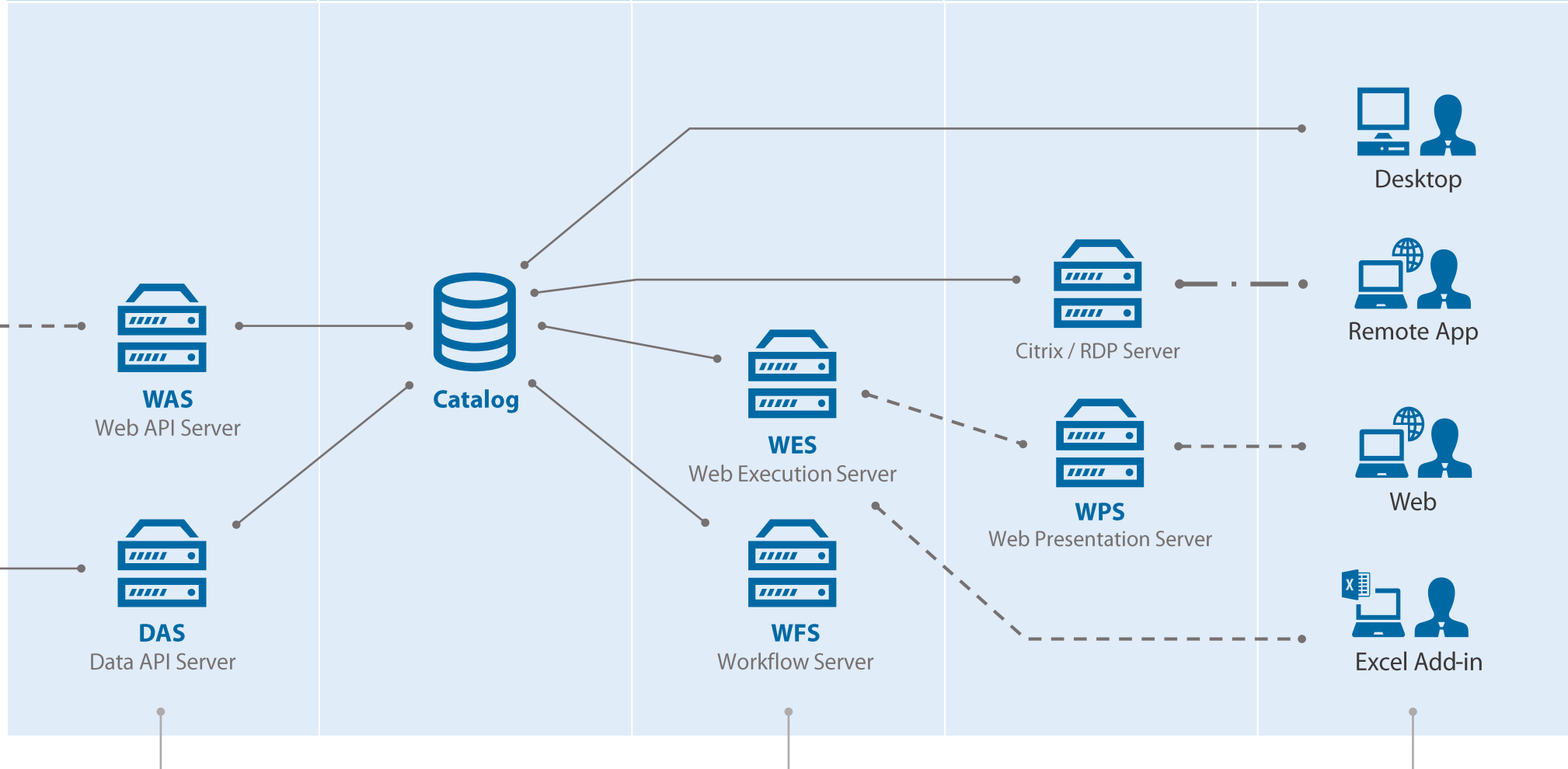
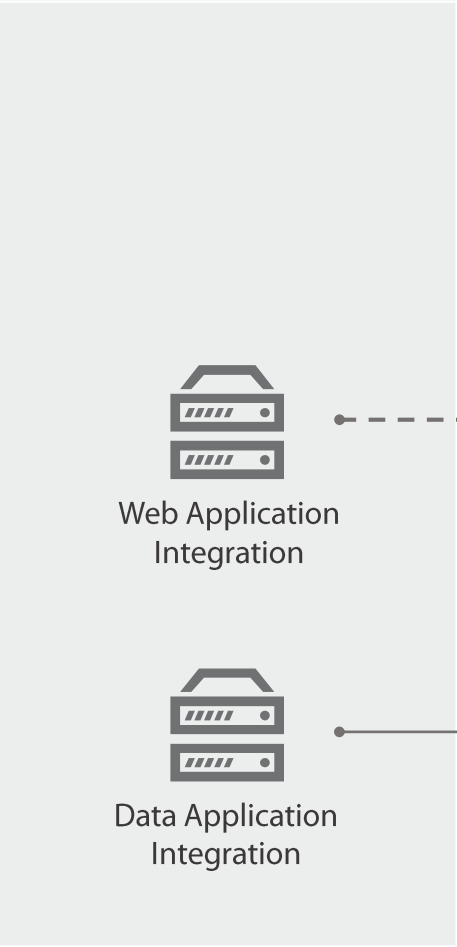
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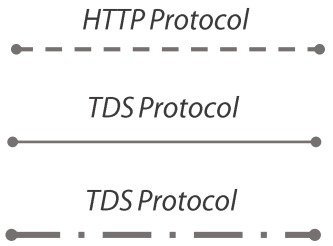
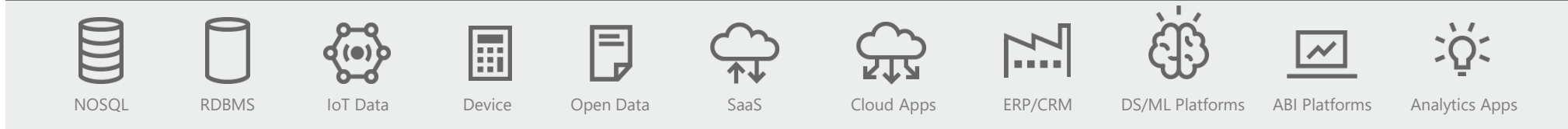
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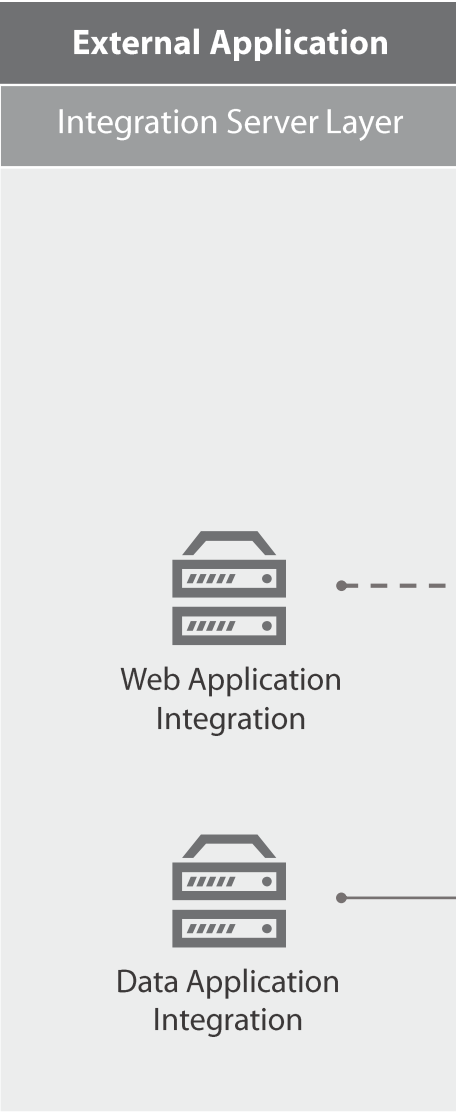
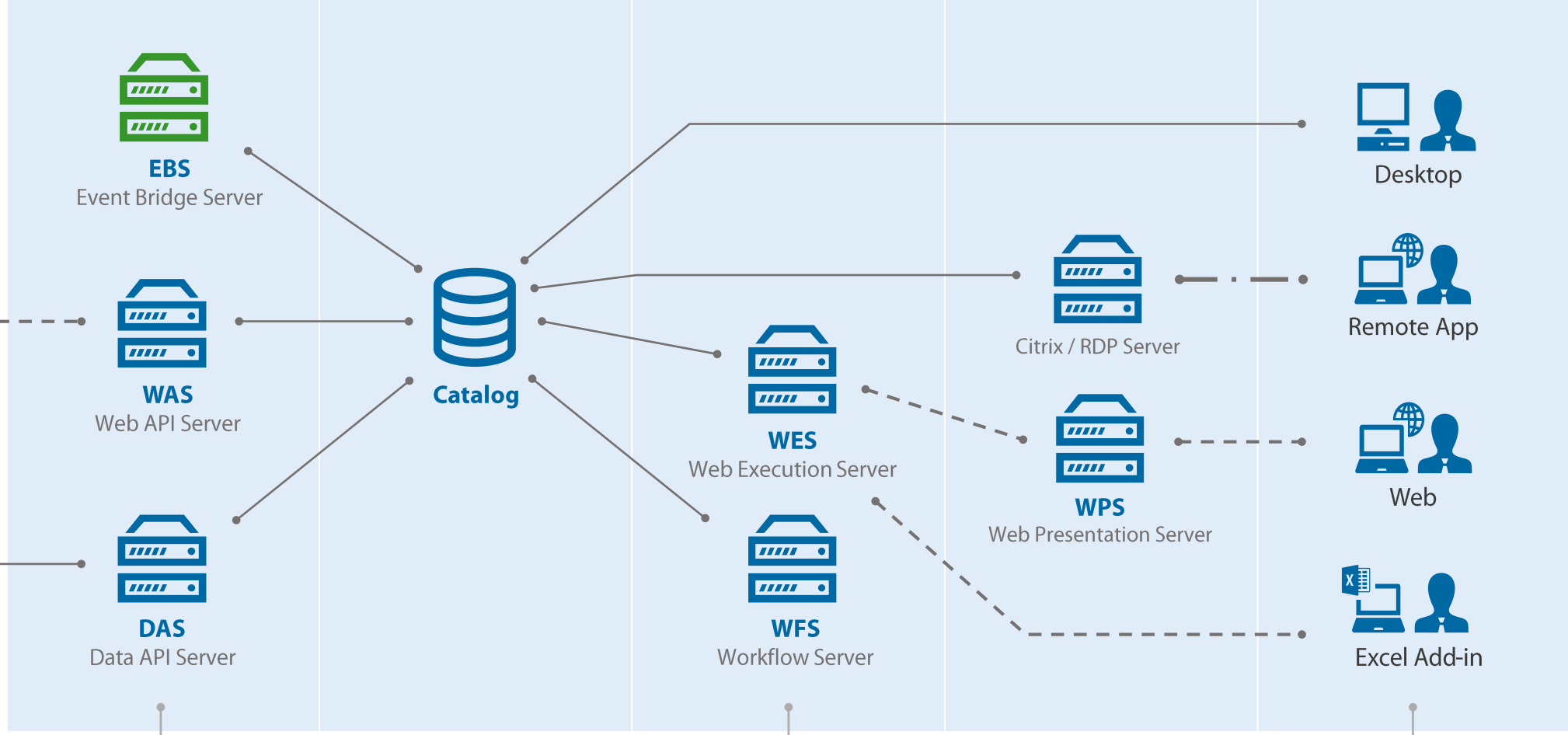
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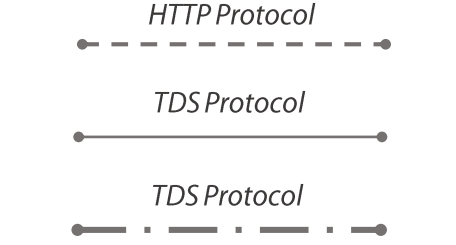
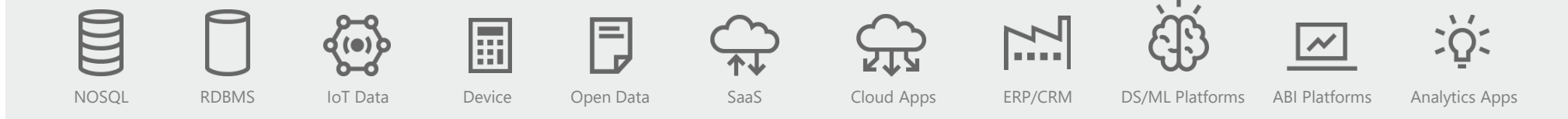
Data Sources / Target



Iriion EDM Architecture Roadmap



Data Sources / Target



Iriion EDM Architecture Roadmap

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Integration Server Layer

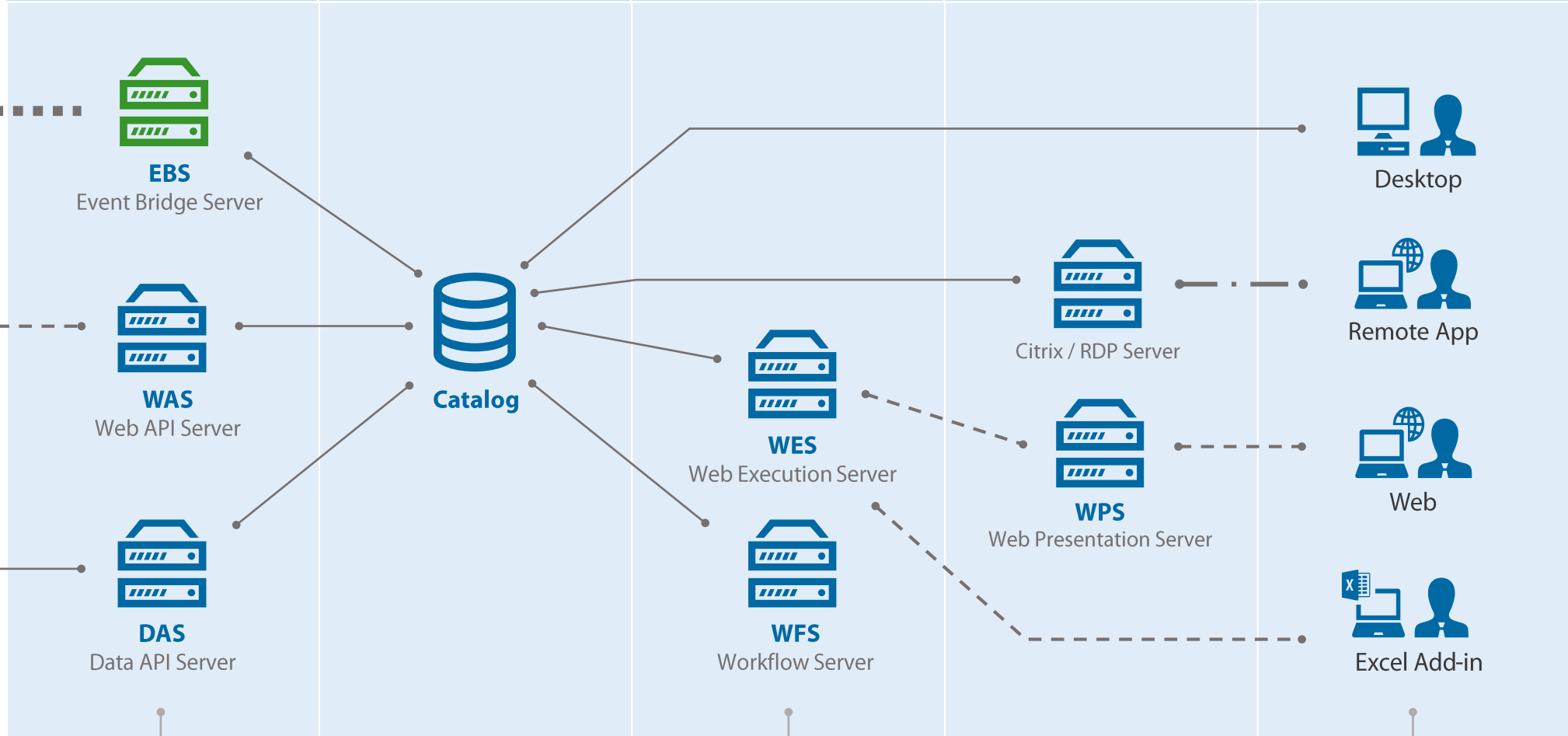
kafka
RabbitMQ

FOLDER EVENT

MQTT
IBM MQ

Web Application Integration

Data Application Integration



Data Sources / Target

NOSQL	RDBMS	IoT Data	Device	Open Data	SaaS	Cloud Apps	ERP/CRM	DS/ML Platforms	ABI Platforms	Analytics Apps

HTTP Protocol
TDS Protocol
TDS Protocol
Event

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