

Envision Gen 2 Hardware System Requirements - On Premise

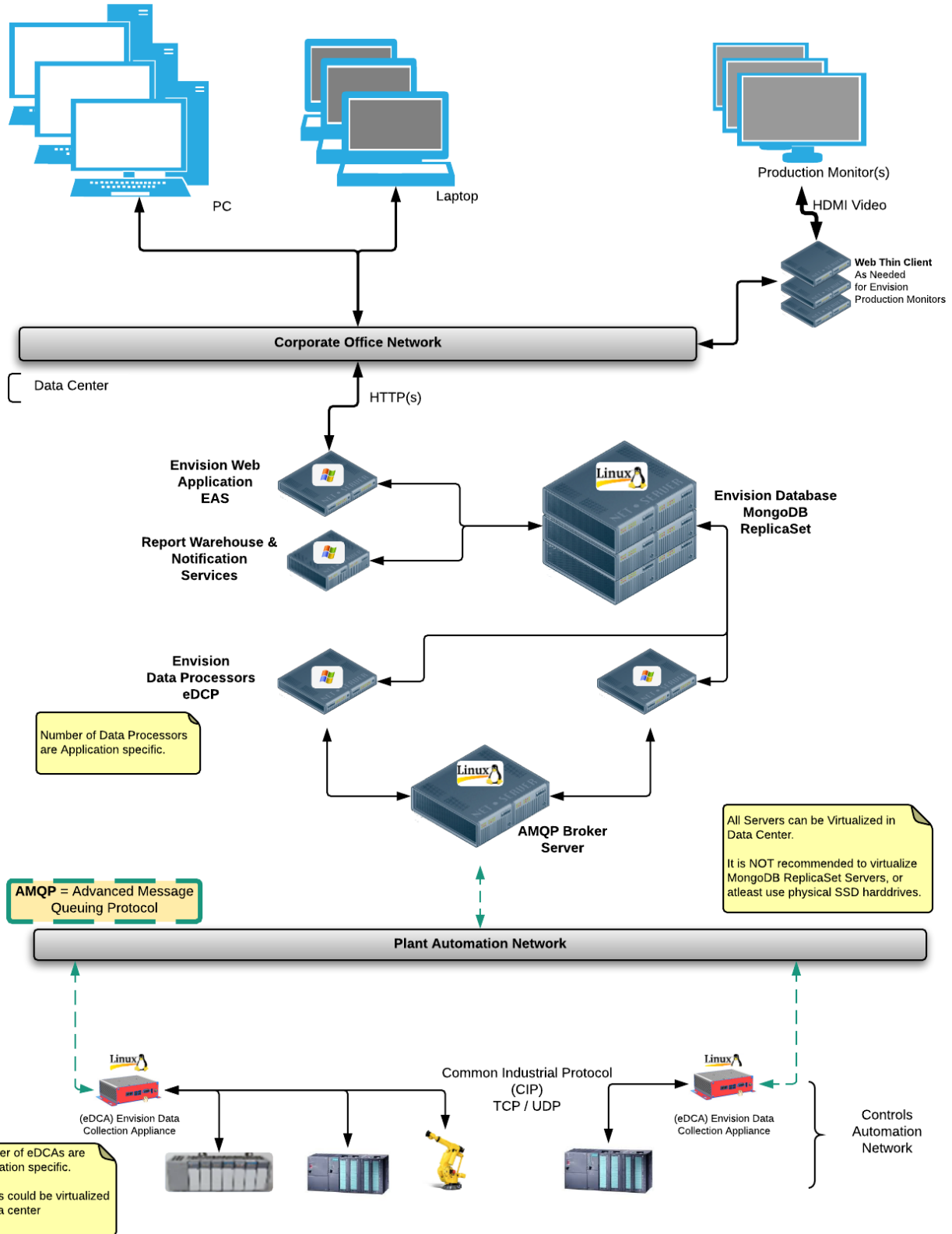
 Beet reserves the right to change hardware specifications at any time without notice.

Specifications as of Envision v3.6 Gen 2.

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Network Architecture Overview

Production Envision Gen 2 Network Architecture (DW-CIP)



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Envision On-Prem Solution

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[Production Envision Gen 2 Network Architecture \(DW-CIP\) - Envision On-Prem Solution](#)

Envision Web Application Server (EAS)

EAS Server (Typical per Plant) (**This can be virtual**)

- Processor: 10 core 2.7 GHz CPU
- Memory: 32 GB (Recommended 64 GB)
- Storage: 150 GB (OS and Application)
- Required Software:
 - Windows 2012 R2 64-bit Standard Server
 - .NET 4.0
 - MongoDB Arbitrator (Included with EAS Application)
 - Envision EAS Application Package (Beet Installer - License)

Envision Application Database Server (MongoDB ReplicaSet)



It is highly recommended to have two systems for redundancy, performance, and to facilitate complete backups. Only a two system deployment will be supported in a production environment.

Physical hardware is recommended, but can be virtual under certain conditions, please discuss with your account manager first.

For every 10,000 SmartTags requires:

- Processor: 32 core 2.7 GHz CPU
- Memory: 256 GB
- Storage Throughput: 15,000 IOPs
- Network: Two (2) Ethernet Interfaces (Could reside on same subnet, then only one Ethernet Interface is used)
 - Connection to EAS and Report Warehouse Services
 - Connection to eDCP(s)
- Software
 - Linux CentOS 7 (64-bit) - Latest Patches
 - MongoDB (Included with EAS License)
- Storage Sizing = $A * (3600 / B) * C * D * 700$
 - Example:

Variable	Description	Example Data
A	Smart Tag Count	5000
B	Cycle Time (Seconds)	6
C	Hours of Production	8
D	Historical Data Kept (Days)	30

- Storage Sizing = $5000 * (3600/6) * 8 * 30 * 700 = 504 \text{ GB}$

Report Warehouse & Notification Services Server

- Processor: 8 core 2.7 GHz CPU
- Memory: 16 GB (Recommended 32 GB)
- Storage Size = 200 GB
- Required Software:
 - Windows 2012 R2 64-bit Standard Server
 - Envision Applications
 - enSync
 - EAS DP
 - Scan Notification
 - Report Scheduler

Envision Data Processor (eDCP)

- Processor: 4 core 2.1 GHz CPU
- Memory: 16 GB (Recommended 32 GB)
- Storage: 150 GB
- Ethernet Interface(s)
 - Connection to Envision Database
 - Connection to AMQP Broker
- Required Software:
 - Windows 2012 R2 64-bit Standard Server
 - .NET 4.5
 - Envision eDCP Application Package (Beet Installer - License)

AMQP Broker Server

- Processor: 8 core 2.7 GHz CPU
- Memory: 16 GB (Recommended 32 GB)
- Storage: 400+ GB SSD
- Network: Two (2) Ethernet Interfaces
 - Connection to PLCs (Typically on Controls Network)
 - Connection to Envision Data Processor(s) (eDCP)
- Required Software
 - CentOS 7 64-bit
 - Java 1.8
 - RabbitMQ AMQP Broker Service
 - PostgreSQL Database
 - Envision Broker Service Applications

eDCA Appliances (Data Collection Industrial Devices)

[eDCA XI Series Appliance](#)

[eDCA XiS Series Appliance - IP65 Rated](#)