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Partners Portal Technical architecture document

Partners Portal 1

C1 Document history

| **REV** | **DATE** | **STATUS** | **AUTHOR** | **ENTITY** | **COMMENT** |
| --- | --- | --- | --- | --- | --- |
| 1 | 27/09/2016 |  | C. EL ABDELLAOUI | ALD | Creation of the document |
| 2 | 15/04/2023 |  | LOKANATHA GAUDA | ALD | Update with latest changes |
| 3 | 03/06/2024 |  | LOKANATHA GAUDA | Ayvens | Update server details |
| 4 | 31/01/2025 |  | LOKANATHA GAUDA | Ayvens | Update server details |
|  |  |  |  |  |  |

Project team

| **ENTITY** | **ROLE** | **NAME** |
| --- | --- | --- |
| ALD | Project manager | Shwetha Jwalanna |
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| ALD | Developer | Lokanatha Gauda |
| ALD | Developer | Lakshmiprasanna Chebrolu |
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| ALD | QA | Nikhat Raza |
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Diffusion list

| **ENTITY** | **ADDRESS** | **ACTION** |
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| SG / ALD | list.gsc-ald-partnership-support@socgen.com | Partnership support |
| SG / ALD | gts-ald-windows@socgen.com | GTS Windows |
| SG / ALD | list.gsc-ald-servicedesk-delivery@socgen.com | SDM |
| SG / ALD | gsc-gts-pas-dre-mssql@socgen.com | GTS SQL |

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1. Introduction

Purpose

This document intends to describe the Platform architecture for the Partnership portal.

Terminology

| **TERM** | **DEFINITION** |
| --- | --- |
| Web Front End (WFE) | SharePoint server whose role is to respond to user’s requests |
| Application server (APP) | SharePoint server whose role is to process heavy loads |
| AD | Active Directory |
| AD DS | Active Directory Domain Server |
| AD FS | Active Directory Federation Service |
| DMZ | Demilitarized Zone |
| DNS | Domain Name System |
| GC | Global Catalogue |
| LDAP | Light Directory Access Protocol |
| New Quoter | Quotation module of Partnership Portal |
| Pivot Service | Service used for user management in Partnership Portal |
| Web services | WCF Routing service. This routing service acts as gateway to other services like PIVOT, Notification Service, Service layer etc. |
| EoN | Eyes on network |
| ADRAC | Active Directory Report Audit Control. This tool is used to scan AD vulnerabilities |

2. Technology

Tools / products

• SharePoint 2016 standard edition

• SQL Server 2019, 2022

• Redis 6.2

• Message Queuing (MS MQ)

• AD FS Windows Server 2022

• Active directory & Domain controller (Windows Server 2016)

Stack overview

• C#

• ASP Net 4.6.2 & 4.8

• WCF

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• Web Api

3. High level architecture

Functional overview

This application is used by ALD white label partnership users to generate, view, and manage quotations. The application contains following modules:

1. User management: This module is used by admins to grant access to white label users. 2. Alert management: Admins can send alert to users using this module. The alerts will be sent as emails.

3. Document management: Users can upload documents and share with other users. 4. My fleet: Users can use this feature to see active contracts and orders.

5. Translation management: Used to manage translations.

6. Quotation module: This module is used to generate, view, and manage quotes. 7. Authentication module:

- Authentication/Authorization is provided by ADFS using SAML tokens.

- API authentication is handles by OAuth.

Application user roles:

1. Dealer: Also known as “Salesperson”.

- This user belongs to white label partnership, can login to the application and generate / view and validate quotations.

- Each dealer user should belong to one Supplier and should have a valid email id set by Supplier company.

- Their scope is limited to the quotations generated for the supplier.

- They can request access on behalf of other dealers belong to same supplier. 2. Partner: Also known as “Partner manager”.

- This user also belongs to white label partnership.

- Partner users can view all the quotations created under the Partnership.

- They can request access for the dealer users.

3. Admin: Also known as country admin.

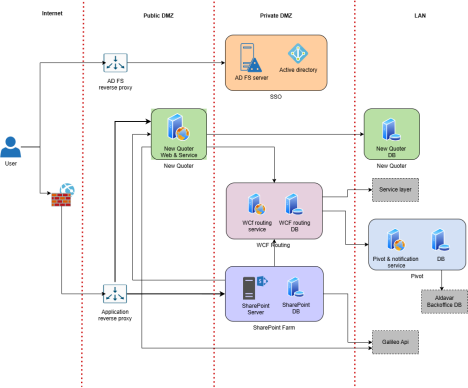
- Administrators are ALD users who manage user access for Partnership portal. - They can create / remove / update users.

- They need to approve all the user creation or profile modification requests sent by partner or Dealer users.

- In specific cases, they can configure car policies, commission levels and quotation products. - Admins can add, delete, or update translations.

The global architecture is described in the following schema:

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(HIGH LEVEL ARCHITECTURE DIAGRAM)

Environment sizing

| **ROLE** | **NUMBER OF SERVERS IN PROD** | **NUMBER OF**  **SERVERS IN UAT** | **DESCRIPTION** |
| --- | --- | --- | --- |
| SharePoint  WFE | 2 | 2 | Host the IIS sites for all SharePoint sites. |

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| SharePoint  APP | 2 | 2 | Host the central administration and service application management. |
| --- | --- | --- | --- |
| SharePoint  Database | 1 | 1 | One SQL Instance for all SharePoint databases. |
| Pivot service | 1 | 1 | Hosts the service for user and role management. |
| WCF Routing Database &  Cluster | 3 | 3 | 2 servers for Cluster & always on database servers. One server for cluster file share witness. |
| WCF Routing service | 1 | 1 | Routing server which connects  applications with PIVOT service, Service layer and QTI services. |
| WCF Routing service admin | 1 | 1 | Admin website to manage WCF routing rules. |
| AD Domain  controllers | 1 | 1 | Active directory server used to store user credentials.  Prod domain name:  **myald.automotive.com**  Uat domain name:  **hom.customer.portal** |
| ADRAC tool | 1 | 1 | ADRAC tool to monitor and analyze AD security vulnerabilities |
| AD FS | 1 | 1 | Hosts AD FS service which helps with SSO. |
| AD FS reverse proxy | 1 | 1 | Routing server which redirects user login details to AD FS server. |
| New Quoter | 2 | 2 | Hosts new quoter IIS website and Web Api. |
| New Quoter & Pivot database | 1 | 1 | One SQL instance for New Quoter database. |
| Redis cache | 1 | 1 | One server to hold cache |
| Application  routing | 1 | 1 | Routing server which redirects user requests to SharePoint or New Quoter servers |

Application description

• Service level: Service availability level is “Low”. • Criticity: Low.

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• GTS services used:

- Partnership portal has its own domain and active directory.

- SMTP services are used for messaging.

Application urls

| **Sl**  **no** | **Country** | **Prod url** | **Uat url** |
| --- | --- | --- | --- |
| 1 | NA – ADFS  authentication | https://authenticationportal.com | https://uat.authenticationportal.com |
| 2 | Austria | https://at.my-partnership.com | https://at.accept.my-partnership.com |
| 3 | Bulgaria | https://bg.my-partnership.com | https://bg.accept.my-partnership.com |
| 4 | Brazil | https://br.my-partnership.com | https://br.accept.my-partnership.com |
| 5 | Switzerland | https://ch.my-partnership.com | https://ch.accept.my-partnership.com |
| 6 | Denmark | https://dk.my-partnership.com | https://dk.accept.my-partnership.com |
| 7 | Estonia | https://ee.my-partnership.com | https://ee.accept.my-partnership.com |
| 8 | Finland | https://fi.my-partnership.com | https://fi.accept.my-partnership.com |
| 9 | Greece | https://gr.my-partnership.com | https://gr.accept.my-partnership.com |
| 10 | Croatia | https://hr.my-partnership.com | https://hr.accept.my-partnership.com |
| 11 | Hungary | https://hu.my-partnership.com | https://hu.accept.my-partnership.com |
| 12 | India | https://in.my-partnership.com | https://in.accept.my-partnership.com |
| 13 | Lithuania | https://lt.my-partnership.com | https://lt.accept.my-partnership.com |
| 14 | Latvia | https://lv.my-partnership.com | https://lv.accept.my-partnership.com |
| 15 | Mexico | https://mx.my-partnership.com | https://mx.accept.my-partnership.com |
| 16 | Romania | https://ro.my-partnership.com | https://ro.accept.my-partnership.com |
| 17 | Serbia | https://rs.my-partnership.com | https://rs.accept.my-partnership.com |
| 18 | Sweden | https://se.my-partnership.com | https://se.accept.my-partnership.com |
| 19 | Slovenia | https://si.my-partnership.com | https://si.accept.my-partnership.com |

Database volume and daily flows

Production environment:

| Environment | Instance | Server | Used | Free | Total | Backup drive |
| --- | --- | --- | --- | --- | --- | --- |
| PRD | PWCFRSQL\IS\_WCFR\_PRD | PQUO2K04 PQUO2K06 |  |  |  |  |
| PRD | PTNE2K28\IS\_TNE\_PRD | PTNE2K28 |  |  |  |  |
| PRD | PQUO2K16\IS\_QUO\_PRD | PQUO2K16 |  |  |  |  |

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Homologation environment:

| Environment | Instance | Server | Used | Free | Total | Backup drive |
| --- | --- | --- | --- | --- | --- | --- |
| HOM | HWCFRSQL\IS\_WCFR\_UAT | HQUO2K06 HQUO2K07 |  |  |  |  |
| HOM | HTNE2K28\IS\_TNE\_HOM | HTNE2K28 |  |  |  |  |
| HOM | HQUO2K16\IS\_QUO\_HOM | HQUO2K16 |  |  |  |  |

• Database volume and backup details

Database Volume

and backup.xlsx

• Daily flows volume

Daily flow volume.xlsx

• how many users on the application? : More than 4500 registered users.

Resilience

1. Ability to recover from failure: Low

2. In case of any failure, application support team will check and provide resolution. 3. Partnership Portal does not hold any transactional data related to Quotations. There is no requirement to implement any resilience for transactional data loss.

4. All quotation transactions are done by “Service layer” service. And the data resides in Backoffice systems. Both systems are external to Partnership Portal.

Capacity overview

1. Which capacity the platform can sustain: Each Partnership Portal country URL can support up to 2 million users. The number depends on various factors like hardware and network dependencies. Detailed capacity can be found here at SharePoint documentation : https://docs.microsoft.com/en-us/sharepoint/install/software-boundaries-limits-2019

2. What’s the capacity that must be handle in 3 years: We do not foresee any requirement to increase hardware or software capability in next 3 years. However, based on usage, application team will request GTS for additional CPU / RAM / Disc space.

4. Detailed specification

Hardware, OS and Network specifications

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C1 The following table details the hardware specifications for all Partnership portal servers.

Prod environment servers:

| **SERVER** | **IP** | **NETWORK** | **ROLE** | **OS** | **CPU SPEED** | **RAM** | **DISC** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PTNE2K25 | 192.168.11.23 | DMZ PRV | SHAREPOINT FRT | WIN 2019 | 2.40 GHz 4 Cores | 16 GB | C - 100 GB; D - 100 GB |
| PTNE2K26 | 192.168.11.24 | DMZ PRV | SHAREPOINT FRT | WIN 2019 | 2.40 GHz 4 Cores | 16 GB | C - 100 GB; D - 100 GB |
| PTNE2K23 | 192.168.11.28 | DMZ PRV | SHAREPOINT APP | WIN 2019 | 2.40 GHz 4 Cores | 12 GB | C - 100 GB; D - 80 GB |
| PTNE2K24 | 192.168.11.21 | DMZ PRV | SHAREPOINT APP | WIN 2019 | 2.40 GHz 4 Cores | 12 GB | C - 100 GB; D - 80 GB |
| PTNE2K28 | 192.168.11.27 | DMZ PRV | SharePoint DB | WIN 2019 | 2.90 GHz 4 Cores | 16 GB | C - 60 GB; D - 150 GB; E -70 GB; L - 50 GB; T - 20 GB |
| PQUO2K05 | 192.168.11.29 | LAN | Pivot Service | WIN 2022 | 2.40 GHz 4 Cores | 8 GB | C - 80 GB; D - 50 GB |
| PQUO2K04 | 192.168.11.77 | DMZ PRV | WCF routing  Database | WIN 2022 | 2.40 GHz 6 Cores | 24 GB | C - 100 GB; D - 50 GB; E -100 GB; F - 200 GB; S - 100 GB; T - 40 GB |
| PQUO2K06 | 192.168.11.39 | DMZ PRV | WCF routing  Database | WIN 2022 | 2.40 GHz 6 Cores | 24 GB | C - 100 GB; D - 50 GB; E -100 GB; F - 200 GB; S - 100 GB; T - 40 GB |
| PQUO2K20 | 192.168.11.66 | DMZ PRV | File share for WCF routing always on database | WIN 2022 | 2.40 GHz 4 Cores | 8 GB | C - 100 GB; D - 50 GB |
| PTNE2K16 | 192.168.11.78 | DMZ PRV | WCF routing  service | WIN 2022 | 2.40 GHz 4 Core | 8 GB | C - 50 GB; D - 5 GB |
| PTNE2K20 | 192.168.123.194 | LAN | Routing service  admin | WIN 2022 | 2.40 GHz 4 Core | 16 GB | C - 50 GB; D - 5 GB |
| PCPO2K26 | 192.168.11.72 | DMZ PRV | AD | WIN 2016 | 2.40 GHz 2 Core | 8 GB | C - 80 GB; D - 50 GB |
| PQUO2K29 | 192.168.11.61 | DMZ PRV | ADRAC tool | WIN 2022 | 2.40 GHz 4 Cores | 8 GB | C - 100 GB; D - 50 GB |
| PTNE2K07 | 192.168.11.113 | DMZ PRV | ADFS | WIN 2022 | 2.40 GHz 2 Core | 8 GB | C - 60 GB; D - 5 GB |
| PTNE2K22 | 192.168.110.141 | DMZ PUB | REVERSE PROXY FOR ADFS | WIN 2022 | 2.90 GHz 2 Core | 4 GB | C - 60 GB; D - 30 GB |
| PQUO2K01 | 192.168.110.115 | DMZ PUB | New quoter  application | WIN 2022 | 2.40 GHz 2 Core | 4 GB | C - 60 GB; D - 30 GB |
| PQUO2K03 | 192.168.110.116 | DMZ PUB | New quoter  application | WIN 2022 | 2.40 GHz 2 Core | 4 GB | C - 60 GB; D - 20 GB |
| PQUO2K16 | 192.168.102.24 | LAN | New Quoter & Pivot database server | WIN 2016 | 2.10 GHz 2 Core | 12 GB | C - 80 GB; D - 50 GB; E - 150 GB; F - 150 GB; G - 40 GB; H - 150 GB; I - 150 GB; K - 40 GB; S - 40 GB |
| PTNELX14 | 192.168.110.24 | DMZ PUB | Redis cache | Red Hat  Enterprise  Linux  Server  release 7.6 (Maipo) | 2 Core | 4 GB | C - 40 GB; D - 50 GB |
| PQUO2K19 | 192.168.110.43 | DMZ PUB | Application routing | WIN 2022 | 2.40 GHz 2 Core | 8 GB | C - 60 GB; D - 30 GB |

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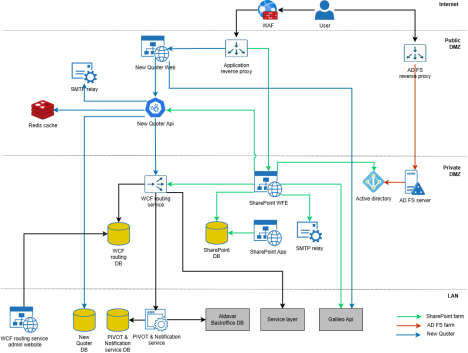
Homologation environment servers

| **SERVER** | **IP** | **NETWORK** | **ROLE** | **OS** | **CPU SPEED** | **RAM** | **DISC** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| HTNE2K26 | 192.168.11.11 | DMZ PRV | SHAREPOINT FRT | WIN 2019 | 2.40 GHz 4 Core | 16 GB | C - 120 GB; D - 100 GB |
| HTNE2K25 | 192.168.11.8 | DMZ PRV | SHAREPOINT FRT | WIN 2019 | 2.40 GHz 4 Core | 16 GB | C - 90 GB; D - 100 GB |
| HTNE2K24 | 192.168.11.7 | DMZ PRV | SHAREPOINT APP | WIN 2019 | 2.40 GHz 4 Core | 12 GB | C - 80 GB; D - 80 GB |
| HTNE2K23 | 192.168.11.6 | DMZ PRV | SHAREPOINT APP | WIN 2019 | 2.40 GHz 4 Core | 16 GB | C - 70 GB; D - 80 GB |
| HTNE2K28 | 192.168.11.16 | DMZ PRV | SharePoint DB | WIN 2019 | 2.40 GHz 4 Core | 16 GB | C - 60 GB; D - 150 GB; E - 50 GB; L - 50 GB; T - 20 GB |
| HQUO2K05 | 192.168.11.37 | LAN | Pivot Service | WIN 2022 | 2.40 GHz 4 Core | 8 GB | C - 80 GB; D - 50 GB |
| HQUO2K06 | 192.168.11.15 | DMZ PRV | WCF routing  Database | WIN 2022 | 2.40 GHz 4 Core | 12 GB | C - 100 GB; D - 50 GB; F - 150 GB; G - 100 GB; H - 40 GB |
| HQUO2K07 | 192.168.11.12 | DMZ PRV | WCF routing  Database | WIN 2022 | 2.40 GHz 4 Core | 12 GB | C - 100 GB; D - 50 GB; F - 150 GB; G - 100 GB; H - 40 GB |
| HQUO2K20 | 192.168.11.74 | DMZ PRV | File share for WCF routing always on database | WIN 2022 | 2.40 GHz 4 Cores | 8 GB | C - 100 GB; D - 50 GB |
| HTNE2K16 | 213.41.15.41 | DMZ PRV | WCF routing  service | WIN 2022 | 2.40 GHz 4 Core | 8 GB | C - 50 GB; D - 80 GB |
| HTNE2K20 | 192.168.242.208 | LAN | Routing service  admin | WIN 2022 | 2.10 GHz 4 Core | 8 GB | C - 50 GB; D - 5 GB |
| HCPO2k26 | 192.168.11.32 | DMZ PRV | AD | WIN 2016 | 2.40 GHz 2 Core | 8 GB | C - 80 GB; D - 50 GB |
| HTNE2K01 | 192.168.11.96 | DMZ PRV | ADFS | WIN 2022 | 2.40 GHz 2 Core | 8 GB | C - 60GB; D - 10 GB |
| HQUO2K29 | 192.168.11.31 | DMZ PRV | ADRAC tool | WIN 2022 | 2.40 GHz 4 Cores | 8 GB | C - 100 GB; D - 50 GB |
| HTNE2K22 | 192.168.110.141 | DMZ PUB | REVERSE PROXY FOR ADFS | WIN 2022 | 2.40 GHz 2 Core | 4 GB | C - 60 GB; D - 30 GB |
| HQUO2K03 | 192.168.110.141 | DMZ PUB | New quoter  application | WIN 2022 | 2.40 GHz 2 Core | 4 GB | C - 60 GB; D - 20 GB |
| HQUO2K04 | 192.168.110.110 | DMZ PUB | New quoter  application | WIN 2022 | 2.40 GHz 2 Core | 4 GB | C - 60 GB; D - 20 GB |
| HQUO2K18 | 192.252.242.3 | LAN | New Quoter &  Pivot database  server | WIN 2022 | 2.10 GHz 4 Core | 16 GB | C - 80 GB; D - 50 GB; E - 90 GB; F - 300 GB; G - 40 GB; H - 100 GB; I - 100 GB; K - 20 GB; M - 50 GB |
| HTNELX14 | 192.252.241.61 | DMZ PUB | Redis cache | Red Hat  Enterpri  se Linux  Server  release  7.6  (Maipo) | 2 Core | 4 GB | C - 40 GB; D - 50 GB |
| HQUO2k19 | 192.168.110.31 | DMZ PUB | Application  routing | WIN 2022 | 2.40 GHz 2 Core | 8 Gb | C - 60 GB; D - 30 GB |

Network flow

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C1 NETWORK FLOW DIAGRAM



(NETWORK FLOW DIAGRAM)

NETWORK FLOW DESCRIPTION

Here is the list of network flows used in the SharePoint farm.

| **SOURCE** | **DESTINATION** | **PROTOCOL-PORT** | **USAGE** |
| --- | --- | --- | --- |

| Users | Application  routing | HTTPS (443) | Reverse proxy / routing |
| --- | --- | --- | --- |
| Application  reverse proxy | SharePoint Web front end | HTTPS (443) | Reverse proxy / routing |
| SharePoint  Web front end (WFE) and  App | SQL | TCP/UDP (14001)  TCP/UDP (445) | Access to SQL instance  SMB |
| SharePoint  Web front end (WFE) | SharePoint APP | TCP (22233-22236)  HTTPS (2016)  TCP (32843-32844)  TCP/UDP (445) | AppFabric  Central administration  SharePoint Web Services  SMB |
| SharePoint  Web front end (WFE) and  App | AD | TCP/UDP (53)  TCP/UDP (88)  UDP (123)  TCP/UDP (135)  TCP/UDP (137)  UDP (138)  TCP (139)  TCP/UDP (389)  TCP/UDP (445)  TCP (636)  TCP (3268)  TCP (3269)  TCP/UDP (464)  TCP (5722)  ICMP | DNS  Kerberos Authentication  W32Time NTP UDP  RPC endpoint mapper  Netbios Datagram  NetBIOS name Resolution  RPC - netlogon  LDAP  Directory Services  Secure LDAP  LDAP for Global Catalog  Secure LDAP for Global Catalog Replication, User and Computer Authentication, Trusts  File Replication  PING |
| SharePoint  Web front end | Pivot &  Notification  services | HTTPS (443) | WCF Services (through WCF Routing service) |
| SharePoint  Web front end | SMTP | SMTP (25) | Send emails and notifications from the application. |
| SharePoint  Web front end | Galileo service | 443 | Galileo back-office service |
| SharePoint  Web front end | Miles service | 443 | Miles web service |

Here is the list of network flows used in the ADFS farm.

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| **SOURCE** | **DESTINATION** | **PROTOCOL-PORT** | **USAGE** |
| --- | --- | --- | --- |
| Users | AD FS Reverse proxy | HTTPS (443) | Reverse proxy / routing for AD FS |
| AD FS  Reverse  proxy | AD FS | HTTPS (443) | Reverse proxy / routing for AD FS |
| AD FS | AD | TCP/UDP 53  TCP 88  TCP 135  TCP 445  TCP/UDP 389 or  TCP/UDP 636  TCP 3268 or  TCP 3269  TCP Dynamic | DNS  Kerberos  RPC  SMB  LDAP or  LDAP over SSL  GC or  GC over SSL  RPC |

Here is the list of network flows used in the New Quoter.

| **SOURCE** | **DESTINATION** | **PROTOCOL-PORT** | **USAGE** |
| --- | --- | --- | --- |
| Users | Application  routing | HTTPS (443) | Reverse proxy / routing for AD FS |
| Application  routing | New quoter web | HTTPS (443) | Reverse proxy / routing for AD FS |
| New quoter api | SQL | TCP/UDP (53458)  Note: For Uat the port is 54855 | Access to SQL instance |
| New quoter api | Pivot &  Notification  services | HTTPS (443) | Web Services (through WCF Routing service) |
| New quoter api | SMTP | SMTP (25) | Send emails and notifications from the application. |
| New quoter api | Redis cache | TCP (6379) | Connects to Redis cache with Redis credentials |
| New quoter api | Galileo service | 443 | Galileo back-office service |
| New quoter api | Service layer | 443 | Service layer back-office service through WCF routing service |

Here is the list of network flows used in the WCF web service, Pivot and Notification service.

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| **SOURCE** | **DESTINATION** | **PROTOCOL-PORT** | **USAGE** |
| --- | --- | --- | --- |
| WCF routing service | PIVOT &  Notification  service | HTTPS (443) | Access to other services hosted on ALD network |
| PIVOT &  Notification  service | PIVOT database | TCP (1433) | Access to SQL instance |
| WCF routing service | WCF routing  database | TCP (1433) | Access to SQL instance |
| PIVOT Service | ALDAVAR back office database | TCP (1521) | Connect to Aldavar Oracle database |
| WCF routing service admin | WCF routing  database | TCP (1433) | Access to SQL instance |

NETWORK FLOW HISTORY

Network-Log-detail

s-GTS-4922.docx

5. Access and security

Administration access

SHAREPOINT FARM

Farm account (domain account) is required to administrate the SharePoint farm.

| **ENVIRONMENT** | **ACCOUNT** |
| --- | --- |
| HOM | hom\svc\_spfarm |
| PROD | myald\psvcspfarm |

Other accounts:

| **ENVIRONMENT** | **ACCOUNT** |
| --- | --- |
| HOM | hom\svc\_spservice |
| HOM | hom\svc\_spInternalApp |
| HOM | hom\svc\_spcacheuser |

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| HOM | hom\svc\_spcachereader |
| --- | --- |
| PROD | myald\psvcspservice |
| PROD | myald\psvcspInternalApp |
| PROD | myald\psvcspccacheuser |
| PROD | myald\psvcspcachereader |

AD FS FARM

The farm administrator account is required to administrate the AD FS farm.

| **ENVIRONMENT** | **ACCOUNT** |
| --- | --- |
| HOM | hom\hadfsinstall |
| PROD | myald\padfsinstall |

NEW QUOTER

| **ENVIRONMENT** | **ACCOUNT** |
| --- | --- |
| HOM | No administration accounts configured in application. Managed by GTS SQL team. |
| PROD | No administration accounts configured in application. Managed by GTS SQL team. |

SQL SERVERS

| **ENVIRONMENT** | **ACCOUNT** |
| --- | --- |
| HOM | No administration accounts configured in application. Managed by GTS SQL team. |
| PROD | No administration accounts configured in application. Managed by GTS SQL team. |

Web service access

Web service access requires use of X.509 certificates for encryption and of X.509 certificates for authentication, the required certificates are installed on WFE servers.

The following table lists certificates that are part of the service access:

| **CERTIFICATE** | **ROLE** | **DESCRIPTION** |
| --- | --- | --- |
| ALD-Partners | Encryption | Issued certificate by application to encrypt the flows between applications and the WCF web services server.  Installed in Certificates store (Local Server\Personal) |

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| SSL-RoutingService | Authentication | Certificate used to authenticate the client machine.  Installed in Certificates store (Local Server\Trusted Root Authorities) |
| --- | --- | --- |

User access

1. Users need to have a personal account to access the application. Users are created in Partnership Portal active directory.

2. Partnership Portal has it’s own custom domain which is separate from ALD’s domain. 3. Domains used in Partnership Portal are: hom.customer.portal for homologation, myald.automotive.com for PRD.

4. The authentication (SSO) is managed by the AD FS farm.

6. Software configuration

Production environment:

| **SERVER** | **ROLE** | **SOFTWARE** |
| --- | --- | --- |
| PTNE2K25 | SHAREPOINT FRT | SharePoint Server 2019 Standard Edition |
| PTNE2K26 | SHAREPOINT FRT | SharePoint Server 2019 Standard Edition |
| PTNE2K23 | SHAREPOINT APP | SharePoint Server 2019 Standard Edition |
| PTNE2K24 | SHAREPOINT APP | SharePoint Server 2019 Standard Edition |
| PTNE2K28 | SharePoint DB | SQL Server 2019 |
| PQUO2K05 | Pivot Service | IIS |
| PQUO2K04 | WCF routing Database | SQL Server 2022 |
| PQUO2K06 | WCF routing Database | SQL Server 2022 |
| PTNE2K16 | WCF routing service | MS MQ |
| PTNE2K20 | Routing service admin | IIS |
| PCPO2K26 | AD | Domain controller, active directory |
| PQUO2K20 | ADRAC | ADRAC tool |
| PTNE2K07 | ADFS | AD FS (WIN 2022) |
| PTNE2K22 | REVERSE PROXY FOR ADFS | Application Request Routing Module (ARR) URL Rewrite Module |
| PQUO2K01 | New quoter application | IIS |
| PQUO2K03 | New quoter application | IIS |
| PQUO2K16 | New Quoter database server | SQL Server 2019 |
| PTNELX14 | Redis cache | Redis server 6.2.2 |

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| PQUO2K19 | Application routing | Application Request Routing Module (ARR) URL Rewrite Module |
| --- | --- | --- |

Homologation environment:

| **SERVER** | **ROLE** | **SOFTWARE** |
| --- | --- | --- |
| HTNE2K26 | SHAREPOINT FRT | SharePoint Server 2019 Standard Edition |
| HTNE2K25 | SHAREPOINT FRT | SharePoint Server 2019 Standard Edition |
| HTNE2K24 | SHAREPOINT APP | SharePoint Server 2019 Standard Edition |
| HTNE2K23 | SHAREPOINT APP | SharePoint Server 2019 Standard Edition |
| HTNE2K28 | SharePoint DB | SQL Server 2019 |
| HQUO2K05 | Pivot Service | IIS |
| HQUO2K06 | Pivot Database | SQL Server 2022 |
| HQUO2K07 | Pivot Database | SQL Server 2022 |
| HTNE2K16 | WCF routing service | MS MQ |
| HTNE2K20 | Routing service admin | IIS |
| HCPO2k26 | AD | Domain controller, active directory |
| PQUO2K20 | ADRAC | ADRAC tool |
| HTNE2K01 | ADFS | AD FS (WIN 2022) |
| HTNE2K10 | REVERSE PROXY FOR ADFS | Application Request Routing Module (ARR) URL Rewrite Module |
| HQUO2K03 | New quoter application | IIS |
| HQUO2K04 | New quoter application | IIS |
| HQUO2K16 | New Quoter database server | SQL Server 2019 |
| HTNELX14 | Redis cache | Redis server 6.2.2 |
| HQUO2k19 | Application routing | Application Request Routing Module (ARR) URL Rewrite Module |

7. Security

SharePoint Farm

Production environment:

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |

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| psvcspfarm | Farm service  account | This account executes the following services:  SharePoint 2016 Timer  Central administration  application pool | Domain user.  Roles needed for the SQL Server Instance connection: securityadmin  dbcreator |
| --- | --- | --- | --- |
| psvcspinternalapp | Application  pool account | Application pool execution account of the web  applications | Domain user |

Homologation environment:

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |
| svc\_spfarm | Farm service  account | This account executes the following services:  SharePoint 2016 Timer  Central administration  application pool | Domain user.  Roles needed for the SQL Server Instance connection: securityadmin  dbcreator |
| svc\_spinternalapp | Application  pool account | Application pool execution account of the web  applications | Domain user |

AD FS Farm

Production environment:

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |
| psvcadfs | AD FS service account | Domain account with no  specific rights for ADFS Server farm. | This account must have Full control to the private key of the certificate. |
| padfsadmin | Application  pool account | Local account used to  communicate the AD FS servers. | Local administrator on AD FS Server. |

Homologation environment:

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |
| hsvcadfs | AD FS service account | Domain account with no  specific rights for ADFS Server farm. | This account must have Full control to the private key of the certificate. |

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| hadfsadmin | Application  pool account | Local account used to  communicate the AD FS servers. | Local administrator on AD FS Server. |
| --- | --- | --- | --- |

New Quoter

Production and Homologation environment:

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |
| .\Quoter | Application  pool account  Azure pipeline account for  deployment | Local account used as app pool because the database is in LAN and application servers are in DMZ. This local account has been mirrored in LAN servers to allow database  communication | Account has admin access to run Azure pipeline and  deploy database projects. |

Others

| **ACCOUNT** | **ROLE** | **DESCRIPTION** | **PERMISSIONS** |
| --- | --- | --- | --- |
| AUTOMOTIVE\PSQVCQUOAPP AUTOMOTIVE\HSQVCQUOAPP | Service  account | service account used in PIVOT & Notification service | Access to ALD\_PIVOT & Notificationservice  database  DB reader and writer, have execute permission |
| MYALD\PSQVCQUOAPP  HOM\HSQVCQUOAPP | Service  account | service account used in WCF routing service | Access to ALDROuter DB reader and writer, have execute permission |

8. Monitoring

Specific service monitoring

1. EoN Tool: Partnership portal URLs are monitored by EoN for availability and load time. EoN runs every 15 minutes. In case of any issue or unavailability, the tool will send email alerts to Partnership Portal support team. The tool also has a dashboard to check application status.

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2. Batch job (WCF Routing service): Batch is running on WCF Routing server to check stratus of the routing service. In case of any failure, it will start the service again. This check runs every 5 minutes on the server.

3. Batch job (Notification service): This job is running on PIVOT server. It will monitor and start the notification service in case of any failure. This check runs every 5 minutes on the server.

9. Backup

Server backup

Homologation environment: No backups taken for homologation environment.

Production environment:

| **SERVER** | **ROLE** | **OS Version** |
| --- | --- | --- |
| PTNE2K25 | SHAREPOINT FRT | Veeam backup - daily |
| PTNE2K26 | SHAREPOINT FRT | Veeam backup - daily |
| PTNE2K23 | SHAREPOINT APP | Veeam backup - daily |
| PTNE2K24 | SHAREPOINT APP | Veeam backup - daily |
| PTNE2K28 | SharePoint DB | Veeam backup - daily |
| PQUO2K05 | Pivot Service | Veeam backup - daily |
| PQUO2K04 | WCF routing Database | No backup taken for VM. Database backup is  configured. |

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| PQUO2K06 | WCF routing Database | No backup taken for VM. Database backup is  configured. |
| --- | --- | --- |
| PTNE2K16 | WCF routing service | Veeam backup - daily |
| PTNE2K20 | Routing service admin | Veeam backup - daily |
| PCPO2K26 | AD | Veeam backup - daily |
| PTNE2K07 | ADFS | Veeam backup - daily |
| PTNE2K22 | REVERSE PROXY FOR ADFS | Veeam backup - daily |
| PQUO2K01 | New quoter application | Veeam backup - daily |
| PQUO2K03 | New quoter application | Veeam backup - daily |
| PQUO2K16 | New Quoter database server | Veeam backup - daily |
| PTNELX14 | Redis cache | Veeam backup - daily |
| PQUO2K19 | Application routing | Veeam backup - daily |

Database backup

Production environment:

| Instance | Server | System DB  Full backup | Full backup | Differential backup | Log  backup |
| --- | --- | --- | --- | --- | --- |
| PWCFRSQL\IS\_WCFR\_P RD | PQUO2K04/  PQUO2K06 | Every day at 10:30:00  PM. | Every day at 10:00:00  PM. | No | Each day  every 2  hour(s)  between  12:00:00  AM and  11:59:59  PM. |
| PTNE2K28\IS\_TNE\_PRD | PTNE2K28 | Every day at 10:00:00  PM. | Every day at 10:15:00  PM. | No | No |
| PQUO2K16\IS\_QUO\_PRD | PQUO2K16 | Every day at 10:00:00  PM. | Every day at 10:15:00  PM. | No | No |

Homologation environment

| Instance | Server | System DB  Full backup | Full Backup | Differential backup | Log  BackUp |
| --- | --- | --- | --- | --- | --- |

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| HWCFRSQL\IS\_WCFR\_UAT | PQUO2K06/  PQUO2K07 | No | No | No | No |
| --- | --- | --- | --- | --- | --- |
| HTNE2K28\IS\_TNE\_HOM | HTNE2K28 | Every day at 10:00:00  PM. | Every day at 10:15:00  PM. | No | No |
| HQUO2K16\IS\_QUO\_HOM | HQUO2K16 | Every day at 10:00:00  PM. | Every day at 10:15:00  PM. | No | No |

10. DRP

Partnership portal is not part of DRP.

However, WCF routing service and “Authentication portal” are part of DRP.

1. The “Authentication portal” (AD-ADFS) system is shared with MyAyvens. Since MyAyvens application is part of DRP, this part of the application also included in DRP.

2. Due to MyAyvens dependency with Service layer & Aldavar batch invoker, WCF routing service is also part of DRP.

3. WCF routing service acts like a gateway for multiple applications like Service Layer, BO API, Aldavar batch invoker.

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