

Infrastructure Mapping and Configurations	2
Infrastructure Mapping: VA NTP	3
Infrastructure Mapping: VISN04	5
Infrastructure Mapping: VISN07	6
Infrastructure Mapping: VISN08	7
Infrastructure Mapping: VISN10	8
Infrastructure Mapping: VISN21	9
Infrastructure Mapping: VISN23	10
Infrastructure Mapping: SimonMed	11
Infrastructure Mapping: Imbro	12
Infrastructure Mapping: Laurel Bridge	13
Infrastructure Mapping: Dev Environments	14
Infrastructure Mapping: Data Engineering	15
Infrastructure Mapping: Sales Demo	16
Infrastructure Mapping and Configurations Discovery Project	17
Infrastructure Mapping: QA server (.20 & .200)	19

Infrastructure Mapping and Configurations

When working infrastructure matters and servers please first understand the following

1. How are you accessing the servers VPN, Citrix, AVD
2. What account are you using - Zero account (VA)? Domain account Company Cloud
3. Do you know the logout procedure - do **not shutdown the servers** by mistake
4. Do you have an understanding of service accounts and login accounts?
5. Why are you in the server? Do you have Tickets / checklist of tasks?
6. **STOP** if you do not have a ticket to work against and document your access to server
7. Document any issues you find in the ticket/new ticket as needed
8. Check the available disk space and raise an alarm if you think the disk space is insufficient
9. **Logout** after you are done - do not disconnect with windows left open

- [Infrastructure Mapping: VA NTP](#)
- [Infrastructure Mapping: VISN04](#)
- [Infrastructure Mapping: VISN07](#)
- [Infrastructure Mapping: VISN08](#)
- [Infrastructure Mapping: VISN10](#)
- [Infrastructure Mapping: VISN21](#)
- [Infrastructure Mapping: VISN23](#)
- [Infrastructure Mapping: SimonMed](#)
- [Infrastructure Mapping: Imbro](#)
- [Infrastructure Mapping: Laurel Bridge](#)
- [Infrastructure Mapping: Dev Environments](#)
- [Infrastructure Mapping: Data Engineering](#)
- [Infrastructure Mapping: Sales Demo](#)
- [Infrastructure Mapping and Configurations Discovery Project](#)
- [Infrastructure Mapping: QA server \(.20 & .200\)](#)

Infrastructure Mapping: VA NTP

Role	IP Address	Server Domain Name	URLs
RETIRED - Application Server IP	10.184.103.135		
RETIRED - Database Server IP	10.184.103.139		
RETIRED - Gateway AppServer URL	10.184.103.138		https://vhantp.r01.med.va.gov/account/signin.aspx
RETIRED - Bridge Gateway IP - thunderbolt	10.184.33.38		
RETIRED - Test node	10.184.103.141		http://10.184.103.141/account/signin.aspx
RETIRED - Test Gateway	10.184.103.137		
	NEW INFRASTRUCTURE DETAILS BELOW		
NTP PROD DB (OIT Hosted)		OITSCRSQLNTP016.r01.med.va.gov	
NTP LightningBolt Bridge Gateway	10.184.33.38		
NTP App Server	10.184.102.201	VHASCRCCHAHDLP1.R01.ME D.VA.GOV	https://vhantp.r01.med.va.gov/
NTP Gateway Server	10.184.102.202	VHASCRCCHAHDLP2.R01.ME D.VA.GOV	
NTP Elastic Search Node	10.184.102.203	VHASCRCCHAHDLP2.R01.ME D.VA.GOV	
NTP HL test Gateway Server	10.184.102.205	VHASCRCCHAHLTST1.R01.ME D.VA.GOV	https://vhasrcchaltst1.r01.med.va.gov/ux/index.html#signin
NTP HL test App Server NTP Pre-prod Elastic	10.184.102.206	VHASCRCCHAHLTST2.R01.ME D.VA.GOV	https://vhasrcchaltst2.r01.med.va.gov/ux/index.html#signin
PACS Public download server	http://63.145.247.35/ClientWeb/installers/ https://integration.intelera.com/UserAuthentication?action=createSession&username=foundations&authToken=4dfdec70ccb2ef2144f9ccd1e4bd5812&pac	http://63.145.247.35/ClientWeb/installers/	http://63.145.247.35/ClientWeb/installers/

	sUser=foundations&client d=foundations		
NTP PACS workstation	NA	NA	@Ahsa Yakir can you please get this from Jakub

Infrastructure Mapping: VISN04

Role	IP Address	Server Domain Name	URLs	Specs
Production DB (OIT)		OITLEBSQLHLFR.va.gov		
Production WebApp	10.35.24.16 7	vhalebccaHLFWBP	https://foundations.lebanon.med.va.gov/	2cpu, 12gb E (100GB)
Production Gateway - Fileman/HL7	10.35.24.16 6	vhalebccaHLFDG2	https://vhalebcca hlfdg2.v04.med.va.gov/	4cpu, 16gb E (100GB) F (500GB) G (500GB)
Elastic Node	10.35.24.16 5	vhalebccaHLFDG1		2cpu, 8gb E (100GB) F (500GB)
Pre-Prod Webapp	10.35.24.16 8	vhalebccaHLFWBT	https://vhalebcca hlfwbt.v04.med.va.gov/	2cpu, 8gb E (100GB)
Pre-Prod Gateway	10.35.24.16 9	vhalebccaHLFDGT		2cpu, 8gb E (100GB) F (500GB)

Infrastructure Mapping: VISN07

Role	IP Address	Server Domain Name	URLs
Production DB (OIT)		OITBIRSQLHLFR.va.gov	
Production WebApp	10.59.17.11	VHABIRCCAHLFR1	https://vhabirccahlfr1.v07.med.va.gov/ https://vhabirccahlfr1.v07.med.va.gov/
Production Gateway - Fileman	10.59.17.12	VHABIRCCAHLFR2	
Production Gateway - HL7	10.59.17.13	VHABIRCCAHLFR3	
Elastic Node	10.59.17.14	VHABIRCCAHLFR4	
Pre-Prod Webapp	10.59.17.15	VHABIRCCAHLFR5	https://vhabirccahlfr5.v07.med.va.gov/
Pre-Prod Gateway - Fileman	10.59.17.16	VHABIRCCAHLFR6	
Pre-Prod - HL7	10.59.17.17	VHABIRCCAHLFR7	
Image Launcher installed	10.59.17.14		UN: FOUNDATIONS@CS Pw: HLF

Infrastructure Mapping: VISN08

Role	IP Address	Server Domain Name	URLs
Production Application Server (Primary)	10.71.22.130	VHAV08CCAFAPP1	http://foundations.v08.med.va.gov/
Production Application Server (Secondary) - ETL Thread executor	10.71.22.131	VHAV08CCAFAPP2	10.71.22.131
Production Database Server	10.71.22.132	VHAV08CCAFDB	
Database replication	10.71.22.133	VHAV08CCAFDBR	
Production Gateway Node Fileman/RPA	10.71.22.134	VHAV08CCAFGDI	
Production Gateway Node HL7/Mirth	10.71.22.135	VHAV08CCAFGHL7	
Production Elastic Search Node	10.71.22.136	VHAV08CCAFES	
PreProd application Server and database node	10.71.22.140	VHAV08CCAFTST	https://vhav08ccaftst.v08.med.va.gov/
Order Reconciliation (From SecureCRT)	10.71.22.141	VHAV08CCAFTST2	
ISite PACS Workstation	10.71.22.150		

Data Connector
Connector
HL7 - ORU
HL7 - ORM
HL7 - ADT
Powerscribe
DICOM
Fileman - Cases
Fileman - Orders
LAB

Infrastructure Mapping: VISN10


The security group used for PIV access to these VMs is: "VHACLEServerAdminsHealthLevel"

Server Name	Function	IP	URL	CP U	RA M	DRIVE E (Root)	DRIVE (Logs & Utility)	DRIVE (Data Storage)
VHACLECCAHLF P	WebApp	10.83.9. 66	vhaclefoundations.v10.med.va.gov	6	12	150		200
VHACLECCAHLF VDP	Fileman Gateway, pipeline thread	10.83.9. 67	VHACLECCAHLFVDP.v10.med.va.gov	4	8	150	100	500
VHACLECCAHLF HLP	HL7 Gateway	10.83.9. 68	VHACLECCAHLFHLP.v10.med.va.gov	6	12	150	100	500
VHACLECCAHLF ENP	ElasticSearch Node	10.83.9. 69	VHACLECCAHLFENP.v10.med.va.gov	4	8	150	100	500
VHACLECCAHLF DBP	DB	10.83.9. 70	VHACLECCAHLFDBP.v10.med.va.gov	12	32	150	100	500
VHACLECCAHLF T	PreProd WebApp	10.83.9. 71	VHACLECCAHLFT.v10.med.va.gov	4	8	150		100
VHACLECCAHLF VDT	PreProd Fileman Gateway	10.83.9. 72	VHACLECCAHLFVDT.v10.med.va.gov	4	8	150	100	500
VHACLECCAHLF HLT	PreProd HL7 Gateway	10.83.9. 73	VHACLECCAHLFHLT.v10.med.va.gov	4	8	150	100	500
VHACLECCAHLF DBT	PreProd DB	10.83.9. 74	VHACLECCAHLFDBT.v10.med.va.gov	6	12	150	100	500

Infrastructure Mapping: VISN21

Role	IP Address	Server Domain Name	URLs
V21 HL DB PROD (OIT)		OITSCRSQNTNP016.r01.med.va.gov	
V21 HL web server	10.184.102.210	VHASCRCCAHLWEB9.R01.MED.VA.GOV	https://vhascrccahlweb9.r01.med.va.gov/
V21 HL Gateway Server	10.184.102.211	VHASCRCCAHLDP21.R01.MED.VA.GOV	
V21 HL Pre-Prod Server	10.184.102.215	VHASCRCCAHLVG21.R01.MED.VA.GOV	https://vhascrccahlvg21.r01.med.va.gov/
V21 HL ElasticSearch Server	10.184.102.218	VHASCRCCAHLELAS.R01.MED.VA.GOV	

Infrastructure Mapping: VISN23

 move to new infrastructure @Sachin Mehta
 OPS-10: VISN23 | Move gateway & app to new PreProd servers TO DO

Role	IP Address	Server Domain Name	URLs
APP, DB, Fileman,HL7 (Production)	10.111.136.87		https://vaww.foundations.v23.med.va.gov/live
NEW INFRASTRUCTURE DETAILS BELOW			
APP, DB, Fileman,HL7 (PreProd)	10.111.136.77		http://10.111.136.77
PACS client	10.111.136.77		
gateway			
app			
Elastic Node	10.111.136.78		
Visage PACS (test server)			

Infrastructure Mapping: SimonMed

Role	Server Name	IPv4 Public IP	Private IP Addr	Security Groups	Foundation version	URLs
Edge device	AZ- ImdHeaGtw001		10.46.4.91	SimonMed Provided server access via Home - Support Portal - Broadcom support portal	21.5.3	
DATABASE Node	HLSimonmedDB	54.241.246,194	172.30.0.236	DB only port open. RDP accessible via VPN	21.5.3	
APPLICATION	HLSimonmedWeb	54.193.188.80	172.30.0.149	Open HTTP and HTTPS ports. Others accessible via VPN.	21.5.3	https://simonmed.healthlevel.com

Infrastructure Mapping: Imbro

Role	IP Address	Server Domain Name	URLs
Imbro Foundations web server	192.168.2.154		https://imbro.healthlevel.com/
Imbro Foundations TEST server	192.168.2.64		http://192.168.2.64/
Imbro Gateway	192.168.2.229		
Imbro Database	192.168.0.236		
Imbro ElasticSearch	192.168.1.82		
VPN Server	192.168.3.200 192.168.1.26		

Infrastructure Mapping: Laurel Bridge

 @Sachin Mehta migrated LaurelBridge from Azure to same environment as SimonMed on Jul 29, 2021

Role	Server Name	IPv4 Public IP	Private IP Addr	Security Groups	Foundation version	URLs
Edge device	AZ- ImdHeaGtw001		10.46.4.91	@Sachin Mehta what should this be?	21.5.3	
DATABASE Node	HLSimonmedDB	54.241.246.194	172.30.0.236	DB only port open. RDP accessible via VPN	21.5.3	
APPLICATION	HLSimonmedWeb	54.193.188.80	172.30.0.149	Open HTTP and HTTPS ports. Others accessible via VPN.	21.5.3	@Sachin Mehta what should this be?

Infrastructure Mapping: Dev Environments

Key		Value
DNS		test.healthlevel.com
Internal IP		<u>172.30.0.147</u>
DB Server		EC2AMAZ-NVQ87KAMSSQLSERVER01
Authentication mechanism		Active Directory (fndad*)
Monitoring Essential		Not in my opinion
Maintainer		Adway, but most engineers have access to system and chip in.
<p>There are multiple web applications running on the system, where versions of applications are constantly changing.</p> <p>These can be accessed at https://test.healthlevel.com/engineer-name</p> <p>eg. https://test.healthlevel.com/kinan, https://test.healthlevel.com/aditi etc</p>		
<p>Additional Databases available for testing - outside individual DBs per Engineer - available for testing on this machine</p>		
V08		
V23		
VA-NTP		
<p>Other Applications Running</p>		
Jenkins	8085	http://172.30.0.147:8085/ (VPN ONLY)
HRM	4444	https://test.healthlevel.com:4444/orangehrm-4.3.4/symfony/web/index.php/dashboard
<p>Note</p>		
<p>terminated on 4/8 instance ID: i-affce36f</p>		

Infrastructure Mapping: Data Engineering

⚠️ to be confirmed by @Sandeep Kulkarni

URL's	DE Server	
domain name	https://de.healthlevel.com/	on AWS
Private IP	172.30.0.99	Webapp
Private IP	172.30.0.69	SQL Server
https://de.healthlevel.com/ntp/ux/index.html#signin	NTP	
https://de.healthlevel.com/v04/ux/index.html#signin	V04	
https://de.healthlevel.com/v07/ux/index.html#signin	V07	
https://de.healthlevel.com/v08/ux/index.html#signin	V08	
https://de.healthlevel.com/v10/ux/index.html#signin	V10	
https://de.healthlevel.com/v21/ux/index.html#signin	V21	
https://de.healthlevel.com/v23/ux/index.html#signin	V23	
https://de.healthlevel.com/gold/ux/index.html#signin	Gold	
https://de.healthlevel.com/Summit/ux/index.html#signin	Summit	
https://de.healthlevel.com/jira/ux/index.html#signin	Jira	
https://de.healthlevel.com/IMBRO_Pre_Prod/ux/index.html#signin	IMBRO	
https://de.healthlevel.com/pmnode/ux/index.html#signin	pmnode	

Infrastructure Mapping: Sales Demo

⚠ To do: @Sanjay Anand OPS-9: Move Demo app & DB to new servers DONE

Migrate to new server or share simonMed and shutdown old?

- move demo db to m5.2xlarge
- decommission 2018DBServer-Demo-Master-DBs
i-08fb32a98d038ae95
- move demo apps to m5.large

Key	Prod	Foundation version	Form Engine version	Data Pipeline version	Notes
Domain Name	https://demo.healthlevel.com/		old form engine		on AWS
Public IP	13.57.20.217				
Private IP	172.30.0.36				
Web App	172.30.0.149			NA	
	https://demo.healthlevel.com/Trial	21.5.3		NA	
	https://demo.healthlevel.com/cardio	21.5.3		NA	
	https://demo.healthlevel.com/cathpci	21.5.3		NA	
	https://demo.healthlevel.com/payerdemo	21.5.3		NA	
	https://demo.healthlevel.com/radiology	21.5.3			

Infrastructure Mapping and Configurations Discovery Project

High level description of the project

The goals of this project are

1. to map HealthLevel internal and customer infrastructures, application versions, and monitoring coverage
2. to evaluate security against security best practices
3. to document gaps and recommend how to address the gaps
4. to establish a process which will ensure that the infrastructure documentation will stay current

Success criteria:

1. Infrastructure documentation is up-to-date, accurate and comprehensive
2. The sponsor reviews and approves or rejects recommendations
3. There is a plan of action for implementing the approved recommendations
4. There is a repeatable, documented process to keep the configurations of the infrastructure up to date.

Scope:

- Map Servers, Nodes used internally by HealthLevel and externally by customers
 - includes every environment (development, QA, staging, pre-production, production, pilot boxes, demo boxes, etc.)
- Lists installed versions at the application, OS and SQL server levels
- Shows which environments are monitored or not
- Describes security protocols (passwords, PIV dependency)
- Identifies teams and/or individuals responsible for managing each system

Out of scope:

- Feature requests when they do not impact the infrastructure
- to develop a standardized communication plan for notifying customers when changes are needed (can be an extension to this project)
- Administration responsibility will be defined in a subsequent phase

Constraints:

- 21.3 must be released to production before project is kicked-off
- Knowledge of AWS
- Access to AWS console
- Diagram application ?
- Will need customer's help to gather servers specs since HL is hosted on customer's hardware (in some cases)

Assumptions:

- Technical team members gathers the information and draw the network and configuration diagrams
- @Dawn Coates (Unlicensed) has access to all infrastructure, including those within AWS to complete the discovery
- Infrastructure documentation will live in a spreadsheet

Risks:

Risk description	Impact	priority	owner	mitigation	due date
Since many sources need to provide input, completion of this	High	High		@Parag Paranjpe to prioritize this project against	

Project Artifacts

Team Members

Name	role
@Parag Paranjpe	sponsor
@Florence Juge (Unlicensed)	driver
@Sandeep Kulkarni	contributor
@Adway Lele (Unlicensed)	contributor
@Ruchir Patel	contributor
@Florence Juge (Unlicensed)	Informed
@Sachin Mehta	contributer

Kick-off (link to kick-off document)

[Customer Reference Information](#)

Infrastructure tracking document

Meeting time

Meeting notes (Link to meeting notes)

Retro (Link to lessons learned)

project might be delayed				other team members' priorities	
due to the high level of sources, details could be missed	High	High		Find an auditor (need a high level of expertise) @Ruchir Patel ?	

High level milestones:


Milestones	date	status (G/Y/R)	Comments
Kick-off	3/10/21	completed	Reviewed the project with the team, they agreed to have the documentation ready by the end of the month. We will meet next week for updates.
create documentation tracking template		Completed	Sent example to the team
gather data	3/31	Completed	
data accuracy is evaluated	Apr 8, 2021	completed	review AWS
create plan for migrating to new servers	Apr 13, 2021	Not started	
Evaluate costs of migrating current servers to new ones	Apr 8, 2021	Not started	
migrate demo server to simonmed servers	Apr 14, 2021		
Add monitoring to new servers	Apr 30, 2021	Not started	
		Not started	

Infrastructure Mapping: QA server (.20 & .200)

Role	IP Address	URLs	Specs
QA Webapp	172.30.0.20	https://qa.healthlevel.com/	2cpu, 8gb, x86_64 Architecture, zone : us-west-1a, Network upto 5 gigabit
QA Database Server	172.30.0.200		2cpu, 8gb, x86_64 Architecture, zone : us-west-1a, Network upto 5 gigabit

Nodes for QA.

Note: To enhance efficiency and performance, we have transitioned from creating nodes for each individual QA to implementing branch-specific nodes.

Node	URLs	Usage
automation	https://qa.healthlevel.com/automation/ux/index.html#signin	Only for automation tasks.
previous-branch	https://qa.healthlevel.com/previous-branch/ux/index.html#signin	Only to build branches previous than master.
master-branch	https://qa.healthlevel.com/master-branch/ux/index.html#signin	Only to build master.
release-branch	https://qa.healthlevel.com/release-branch/ux/index.html#signin	Only to build release cut branch.
QAbackup1		Extra node for QA's to build any branch.
QAbackup2	https://qa.healthlevel.com/QAbackup2/ux/index.html#signin	Extra node for QA's to build any branch.
Test23.6	https://qa.healthlevel.com/Test23.6/ux/index.html#signin	This node is for 23.6(Not working currently).

Other nodes.

hllgbook	https://qa.healthlevel.com:4545/	For Hllgbook.
MasterQA	https://qa.healthlevel.com/automation/ux/index.html#signin	This is to trigger build on jenkins from githubwebhook.
timer	Do not access this node.	This node is used for timely build on jenkins.

Dev nodes.

dev-india	https://qa.healthlevel.com/dev-india/ux/index.html#signin	This node is for developers only from india team.
poonam	https://qa.healthlevel.com/poonam/ux/index.html#signin	Keeping separate node for US developers from QA nodes.
pranavpatil	https://qa.healthlevel.com/pranavpatil/ux/index.html#signin	Admin node.
ruchir	https://qa.healthlevel.com/ruchir/ux/index.html#signin	Keeping separate node for US developers from QA nodes.
steven	https://qa.healthlevel.com/steven/ux/index.html#signin	Keeping separate node for US developers from QA nodes.