

Western Cape Department of Health and Wellness – PACS-RIS-VNA Architecture Overview

Diagram Acronyms

RIS - Radiological Information System
VR - Voice Recognition System
PACS – Picture Archiving and Communication System
AVS – Advanced Visualization System
CT(AVS) – Existing CT Advanced Visualization System which will remain onsite and be connected to PACS.
BI – Business Intelligence
DMWL – DICOM Modality Work List
ZFP – Zero Foot Print

Optional

RIS

VR

PACS

(AVS)

CT(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Tygerberg Hospital

RIS

VR

PACS

(AVS)

CT(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Groote Schuur Hospital

RIS

VR

PACS

(AVS)

CT(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Red Cross War Memorial Children's Hospital

Cardiology Cath Labs
Cardiology Ultrasound
Cardiology Reporting
Cardiology Advanced Visualizaton

RXH Cardiology

Phase 1

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Karl Bremer Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Brewelskloof Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Khayelitsha Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Mitchell's Plain Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

New Somerset Hospital

RIS

PACS

(AVS)

RIS

VR

PACS

(AVS)

BI / Data Mining

VNA

Staging Environment

Production Environment
High Availability 99.9% uptime – 5 years onlineBI and Data Mining
EnviromentProduction Environment
High Availability 99.9% uptime

Enterprise Solution Hosted in SITA Data Centre

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Paarl Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Victoria Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Worcester Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

George Hospital

RIS

VR

PACS

(AVS)

Onsite Cache
High Availability 99.9% Uptime
3 years data online

Knysna Hospital

ZFP access to RIS / PACS
Order Data sent to DMWL
Broker
DICOM Images sent to
PACS-VNA

VNA

Disaster Recovery Solution
Hosted in 2nd SITA Data Centre

Phase 2

Enterprise RIS
Access

Onsite Cache
1 year data online

DMWL Broker

57 Small Hospitals / CDC / CHC

Enterprise RIS
Access

Onsite Cache
1 year data online

DMWL Broker

2 Dental Facilities

Enterprise RIS
Access

Onsite Cashe
1 year data online

DMWL Broker

3 Specialised Facilities

RIS

VR

PACS

Forensic Pathology

FPS Business Information
Management System (BIMS)

Central Data Repository
Integrated to VNA
Access to Images and
Reports

Provincial Health
Data Centre

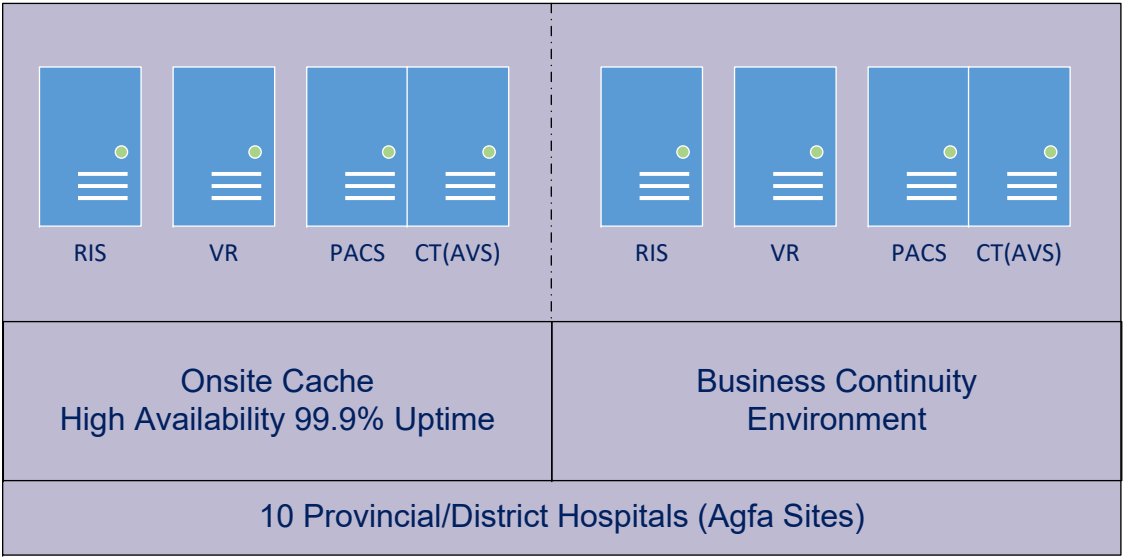
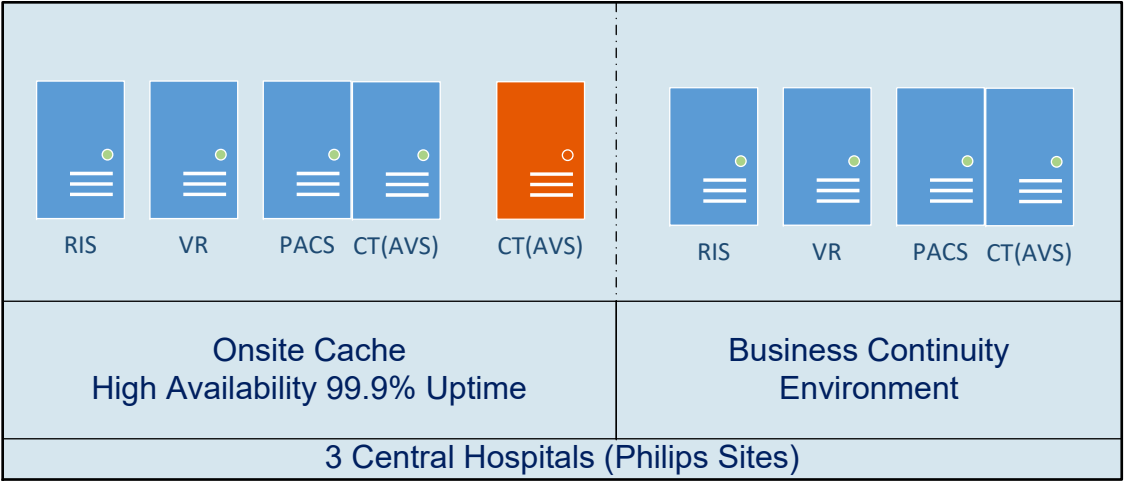
Master Patient Index
Billing Interface
HL7 V2.x ADT and DFT
messaging

Clinicom (HIS)

Document
management
Access to Images and
Reports

Enterprise Content
Management (ECM)

Western Cape Health Information Systems



Tygerberg Hospital

- RIS: Radiology Information System
- PACS: Picture Archiving Communication System
- VR: Voice Recognition
- CT(AVS): Computer Tomography (Advanced Visualization Server)
- BC: Business Continuity
- LAN: Local Area Network

