VISAGE IMAGING®

Visage® 7

CloudPACS

Visage 7 CloudPACS

Value Realization

CloudPACS.com™

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Value Realization

VISAGE IMAGING®

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▶ **Visage 7 Enterprise Imaging Platform | CloudPACS**
Click to view CloudPACS video.

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"from Day One it worked"

"I think the pleasant surprises have really been that it just works, and basically from Day One it worked. I do not lose any sleep over this solution. My team does not lose any sleep over this solution. So those things have been really, really pleasant surprises. I'm incredibly happy with this and we would definitely do it over again."

Marc Kohli, MD

Professor Radiology and Biomedical Imaging

Associate Chair of Clinical Informatics

VALUE REALIZATION

1 What is CloudPACS?

CloudPACS is the Visage 7 Enterprise Imaging Platform ("Visage 7") when deployed in the cloud. Since September 2020, 100% of new Visage customers have chosen CloudPACS as their implementation option instead of deploying Visage 7 in customer-provided infrastructure (e.g., on-premise in customer managed data centers). There are extensive benefits Visage 7 CloudPACS provides institutions as compared to legacy implementations.
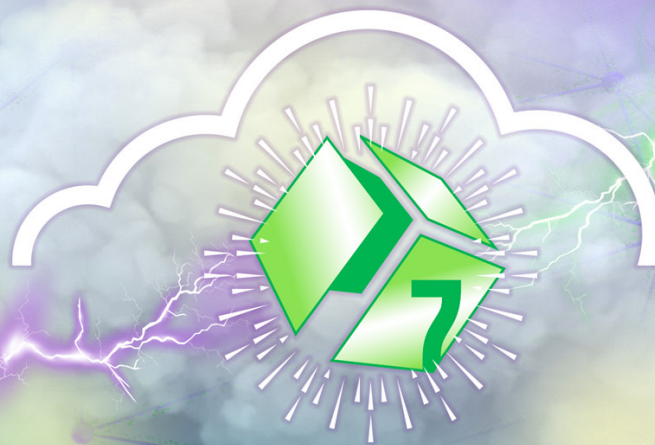
Benefits include:

- Ultrafast on-demand performance

- Robust security

- Immutable data storage for greater data survivability

CloudPACS Pro Tip:

No matter the size of your cloud footprint, with Visage 7, it's very easy to expand and grow. Visage does this both quickly and easily with zero downtime.

Visage® 7
CloudPACS

"Visage is very easy"

"Being one of the biggest health systems in California with such a big footprint and affiliates, for us to expand and grow, Visage is very easy. As part of our implementation, our original implementation, we did expand to our children's hospital that was quickly scoped.
The coolest thing is that we didn't have to worry about ordering additional hardware or worrying about expansion. It was just all rendered, as well as scaled up in the cloud, so that made things so much more easier."

Neil Singh, MBA
Director, Imaging IT Applications

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② Why is Visage 7 faster in the cloud?

VISAGE DELIVERS RAPID VALUE REALIZATION:

Product maturity allows the Visage 7 platform to do things no other PACS

or enterprise imaging solution can. There are several reasons why Visage 7 is

faster in the cloud.

Visage natively refactored the Visage 7 application to:

Take optimal advantage of object-based cloud storage in all major cloud platforms.

Operationally that means multiple hosts have the ability to connect to the same data source

at full performance throughout the entire architecture.

Visage 7 allows direct cloud storage access to:

Leverage multi-host connections, enabling the Visage 7 Render Servers (which are the

highly scalable component that streams data to users) to access that storage directly

from the storage itself. In the cloud, Visage 7 streaming is even faster. That's the key to

ultrafast performance of Visage 7 in the cloud.

Cloud Object Storage

MASSIVELY PARALLEL I/O
Digital Alchemy for Imaging in the Cloud

Visage 7 In The Cloud

Visage 7 Open Archive

Visage 7 Workflow

DYNAMIC ELASTICITY
Adaptive, Balanced Resource Scaling

ON-DEMAND STREAMING
Efficient Delivery with Unparalleled Speed

CloudPACS Pro Tip:

Cloud-native instances, the actual servers
themselves, are exceptionally high-performance
due to the infrastructure capabilities offered in
the cloud. Win. Win.

3

Why isn't latency a problem for Visage 7?

ONE OF THE MOST FREQUENTLY ASKED QUESTIONS ABOUT CLOUD CONCERNS LATENCY: Visage is often asked, "Isn't putting Visage 7 in the cloud going to cause a poor experience for all of our clinical users?" And the answer to that is with Visage 7, no, it isn't. Fortunately, the Visage 7 smart-client is extremely capable of handling low bandwidth, or high latency environments, or both of those at the same time. From the earliest days of Visage 7, we knew that users would be 'somewhere' remote from where the servers were installed. In other words, remote reading, which has now become widespread and commonplace, has always been the normal circumstance with Visage 7 users: simple, ultrafast, anywhere access. And to make that effective, the Visage 7 application automatically prioritizes the on-demand, streaming delivery of data based on what the user is doing.

Visage resource prioritization:

Let's say that you've got four simple viewers on your diagnostic display. If a user positions their mouse pointer over the top left, that stack of images is prioritized and delivered with a higher importance than the other viewers. And as soon as the mouse pointer moves to another stack of images, Visage 7 reprioritizes the current view indicated by the mouse location. Visage 7 does this numerous times per second based on what the user is doing.

Not everything is streamed from the cloud to minimize round trips. Intelligently, common Visage 7 manipulations take place locally on the workstation. For example, scrolling, window level adjustments, panning or zooming, all of those actions happen locally. Also, the application logic automatically determines the appropriate hanging protocol based on the study, and that's all taking place locally as well.

"the Visage application was engineered around latency"

"What we've experienced is that the Visage application was engineered around latency in particular. Such that, even in higher latency connections like we have with the cloud, the radiologist performance is basically equivalent to the on-prem installation."

Marc Kohli, MD

Professor Radiology and Biomedical Imaging

Associate Chair of Clinical Informatics

Visage 7 is bandwidth and latency resilient:

- Dynamic reprioritization of streaming data delivery

- Data cached in RAM, never to disk

- Local smart-client optimization to minimize server roundtrips

- Sophisticated application logic for hanging protocols

- Mature, proven server-side platform

CloudPACS further protects your data by providing:

- Immutable cloud-based storage

- Native support of DICOM TLS

- HL7 MLLP TLS encoded transfer for data transit

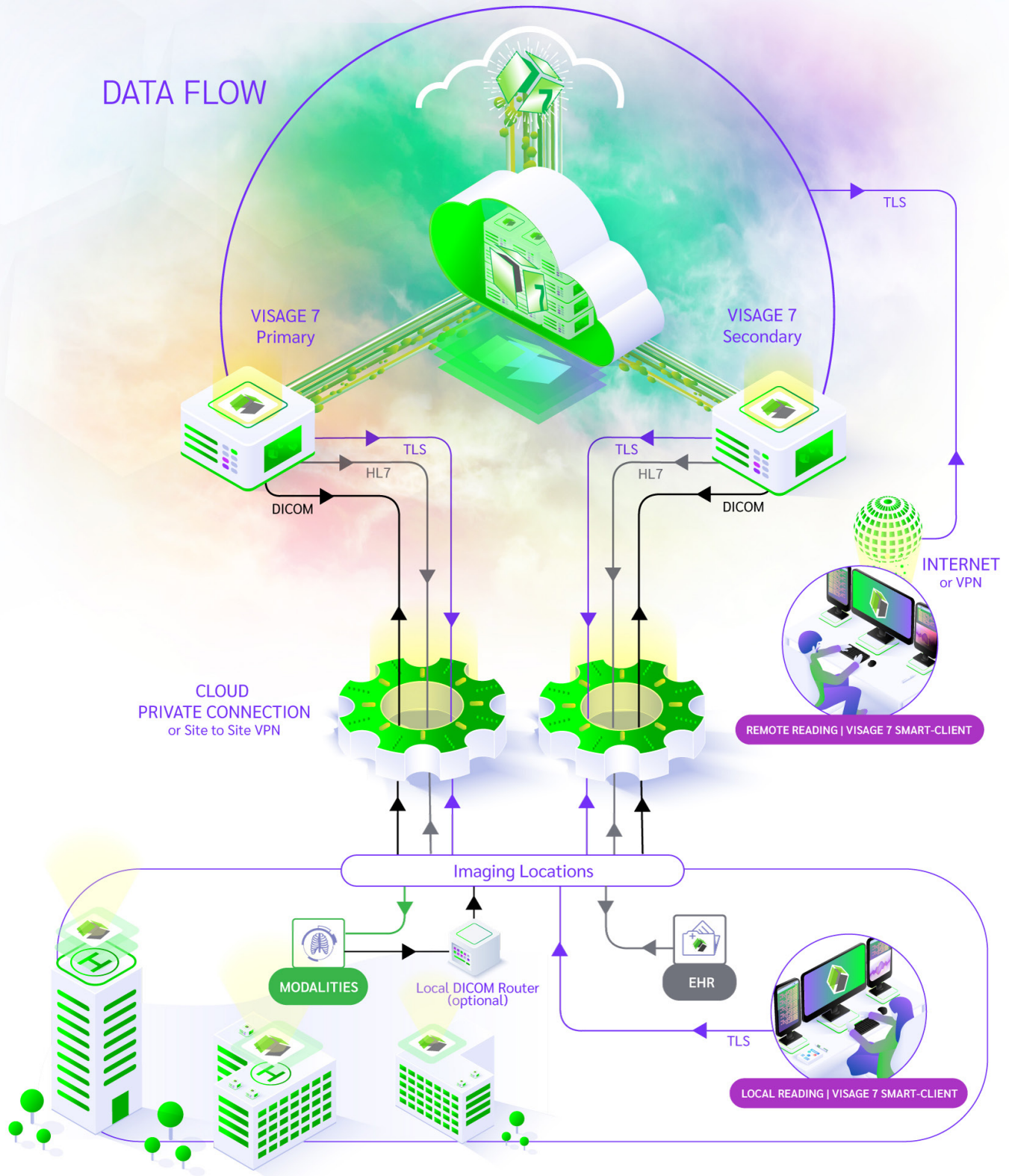- Data is never cached to disk or stored locally at the workstation

CloudPACS Pro Tip:

Visage 7 is implemented in the cloud with multi-path, geographic redundancy, so that if there is any physical disruption, there would be zero downtime, increasing reliability and ensuring uninterrupted, ultrafast performance.

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VISAGE® 7 CloudPACS

DATA FLOW

VISAGE 7 Primary

VISAGE 7 Secondary

TLS

TLS

HL7

TLS

HL7

DICOM

DICOM

INTERNET
or VPN

CLOUD
PRIVATE CONNECTION
or Site to Site VPN

REMOTE READING | VISAGE 7 SMART-CLIENT

Imaging Locations

MODALITIES

Local DICOM Router
(optional)

EHR

TLS

LOCAL READING | VISAGE 7 SMART-CLIENT

4 How is Visage 7 more secure in the cloud?

VISAGE 7 TAKES FULL ADVANTAGE OF ALL THE SECURITY BENEFITS OF THE CLOUD: Visage uniquely protects each customer's data from all other customers, there are no shared resources, further increasing the security for each customer. Visage is often asked about the security of the connection, whether or not VPN protection has to be in place to protect data while in transit. Visage is ahead of the curve. While Visage customers are modernizing their systems to take advantage of DICOM TLS and HL7 MLLP encoded transfers, Visage 7 offers native support today, so data can be fully encrypted while in transit. Even inside the cloud between the different servers, the data is encrypted in transit, it's also encrypted on storage, and there is no data stored on the local workstation.

Visage lifts barriers while keeping the cloud secure from the word "Go":

Some Visage 7 customers now allow direct connection from the user straight into the cloud, whereas in the past, those connections have typically gone from the user through a VPN into the hospital's infrastructure and then to wherever the server environment was. While many Visage 7 customers do require VPN access, we have experienced a trend towards customers allowing direct interaction between their users that are working with Visage 7 and Visage 7 servers in the cloud.

Visage 7 directly connects to the cloud

Fully encrypting all data in transit

VPN

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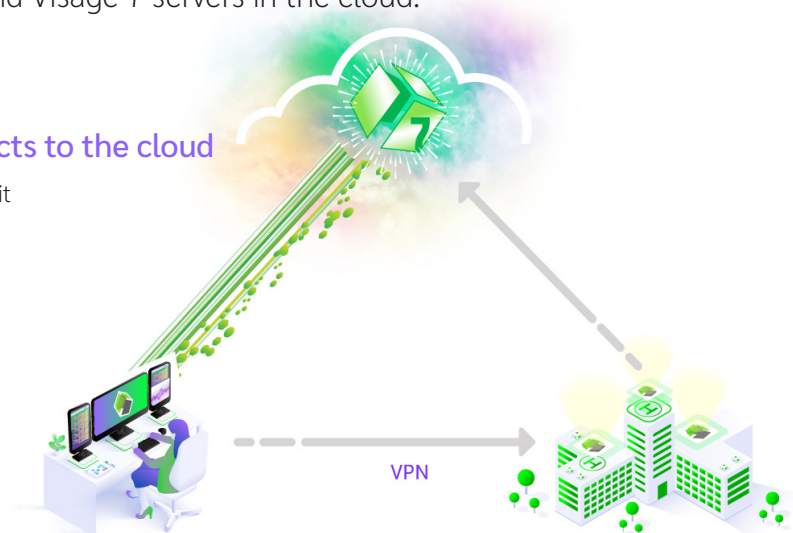
Visage 7 provides more security to ensure maximum protection:

All data is encrypted while in transit, it's also encrypted at rest, and there's no data ever cached on the local workstation other than in RAM, and only while the user has the study open.

After a user walks away from the workstation and is logged out of Visage 7, all of that information is eliminated from the local workstation. Even in situations where we're exchanging data back and forth with other applications via XML file drops (for example), even those files are encrypted locally and contain minimal amounts of information for the purpose of interoperability.
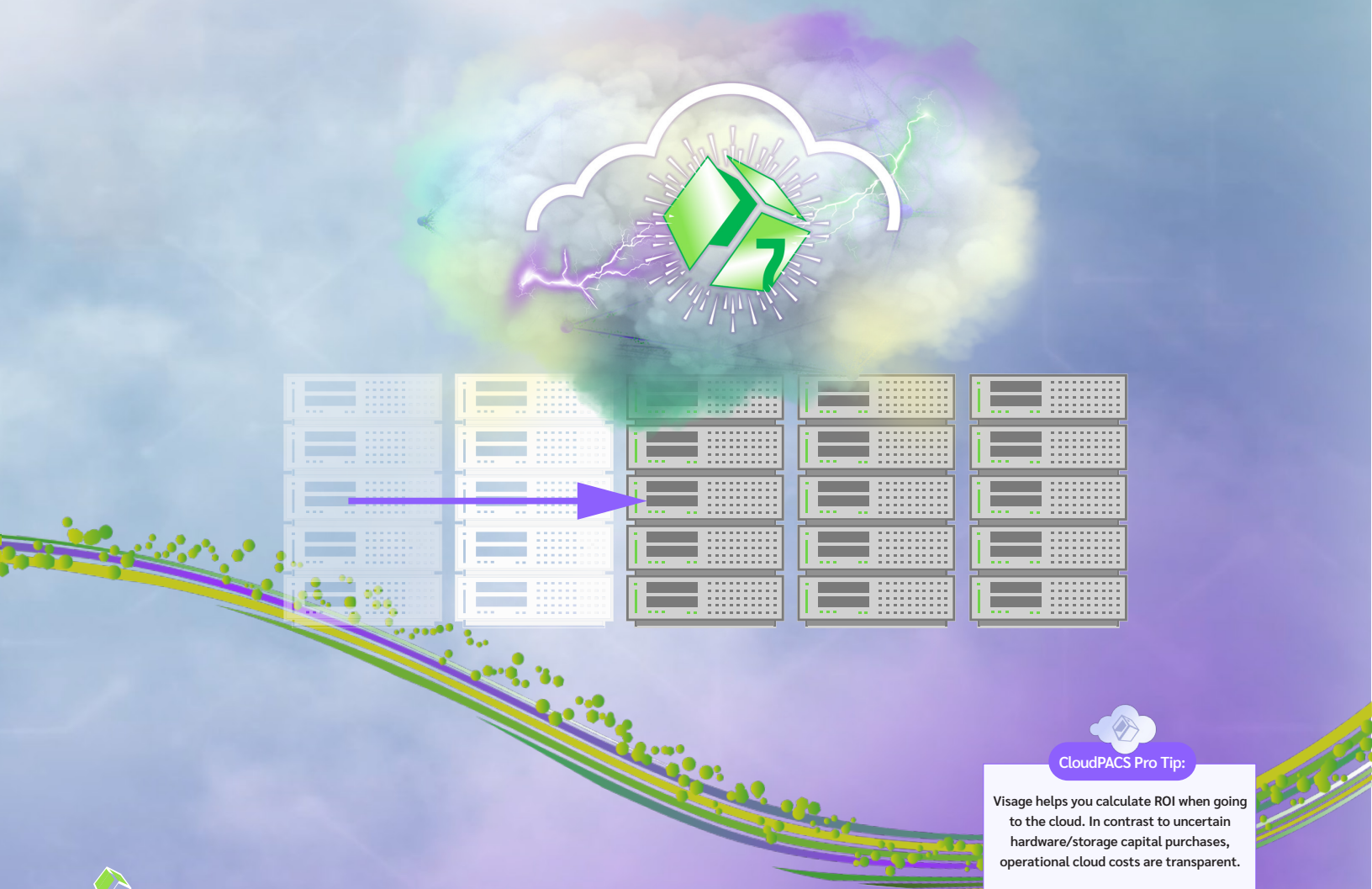
CloudPACS Pro Tip:

Visage 7 uses Active Directory to authenticate users, as well as supports SAML and various multi-factor authentication systems, which are generally supported natively in the Visage 7 smart-client.

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Visage helps you realize value sooner

IMMEDIATELY DEPLOY AND SCALE SERVER CAPACITY WITH NO DOWNTIME:

When implementing in the cloud, Visage can immediately start building out servers rather than waiting for server/storage procurement, delivery and provisioning. The net result is the acceleration of the implementation cycle from ~3-4 months to as much as a year. That allows your institution to realize the value from your Visage 7 investment sooner (e.g., faster go-live), and when you need to grow, the cloud is immediately available to scale to meet your requirements.

CloudPACS Pro Tip:

Visage helps you calculate ROI when going to the cloud. In contrast to uncertain hardware/storage capital purchases, operational cloud costs are transparent.

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6

Visage 7 is even more reliable in the cloud

WITH VISAGE 7, RELIABILITY IS A FEATURE, CLOUD BENEFITS ARE IMMENSE:

Visage always recommends redundant network links, even using the general purpose Internet connection that the institution already has, and putting VPN protection on that to further protect data in transit, so it is truly a private network at that point. Visage always recommends redundant connections, preferably from different local network providers, different Internet service providers, although in this case, it's not regarding a connection to the Internet, it is to a private cloud.

Visage 7 is ultrafast and accessible:

With Visage 7 in the cloud, that does not necessarily mean that Visage 7 is accessible from the Internet. Visage 7 can be accessed from the Internet, but it is not required. That is a customer implementation decision. Another perceived barrier is the ability to get data into the cloud on a quick enough basis. What our experience shows is that Visage 7 is able to receive data at a fast enough rate to handle even the largest customers over a 1 Gbps network.

CloudPACS Pro Tip:

Visage 7 architecture has no single-point-of-failure. Every single device in the entire architecture has at least 2X instances, or more, to ensure no downtime. Scheduled downtime? Not with Visage 7.

Visage 7 Score Card

Results speak volumes. Imaging organizations of all sizes and missions have successfully implemented the Visage 7 Enterprise Imaging Platform with proven value realization in a multitude of areas, including the following:

Capability

01

One Viewer to Rule them All
Speed. Scale. Power.
All in One Viewer™

Ultimate simplicity.
Your One Viewer for all images,
for the entire enterprise.

Productivity

+50%

Increased Efficiency
Reduce Burnout. Work Smarter
And Enjoy It.

Get in the zone. Read faster with
precision and gain up to 2 hours of
productivity per day.

Technical

100%

Ultrafast Access to All Images
Complete Patient Imaging Jacket
On-the-Fly-with all Priors.

All priors, unlimited scale.
If you've got one prior, you've got
all your prior patient imaging.

Growth

23%

Increased CT Utilization
Grow Your Business
With Confidence.

Increase throughput. Change nothing,
just start reading thins.
Ready, start, grow.

Implementation

Up to 300%

Faster Implementation
Go Modern, Go-Live
in Almost No-Time.

Great Go-Live. Visage has the tech
and expertise to get you live faster.

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Click to watch the CloudPACS video

To learn more about how Visage 7 CloudPACS can transform your imaging organization, please visit:

CloudPACS.com™

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