

A photograph of an older man with grey hair, wearing blue medical scrubs, sitting at a desk in a clinical or hospital setting. He is looking towards the camera with a slight smile. In the background, there are computer monitors displaying medical images. The overall tone is professional and reassuring.

**PHILIPS**

IntelliSpace Portal 11

Technical and  
service datasheet

All your advanced analysis needs

**One comprehensive solution**



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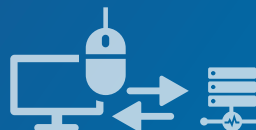
Multiple **clinical**  
domains



Multiple **modalities**



Multiple **patient**  
data sets



Multiple **third-party**  
applications and  
scanners



Multiple **imaging**  
data systems



## One solution

- **Single** license set
- **Single** version
- **Single** advanced platform for all modalities
- **Single** point of service



Multiple  
clients

Multiple  
departments

Network of  
hospitals

# A single, integrated solution

Manage the hospital's advanced analysis needs with a single, comprehensive solution.

Philips IntelliSpace Portal 11 is an advanced visualization platform that offers a comprehensive set of advanced clinical and IT tools on a single platform. Applications are designed to support clinical insight for different cases, while scaling easily to meet your growing IT needs.

## Key advantages

- Manage a single centralized solution for all advanced visualization needs throughout your enterprise
- Enjoy the latest advances in technology year after year with Philips' proven track record
- Scale up as you need
- Work with a single service agreement that covers the lifecycle needs of your advanced visualization platform



### **IntelliSpace Portal 11 connects your entire radiology department**

Since IntelliSpace Portal 11 is server-based, it's easy to manage in the IT environment. All users work with the same software version, and all applications and licenses are managed in one solution.



### **Exceptional scalability and integration**

With IntelliSpace Portal 11 resource-based licensing, you can quickly and easily scale up to the exact number of users you need. With broad multivendor compatibility\*, IntelliSpace Portal connects to most conventional scanners\*. Also, IntelliSpace Portal 11 adapts preprocessing rules to match hospital needs automatically through machine learning. The IntelliSpace server/client architecture makes deploying and managing upgrades simple through centralized deployment, user preferences and setting, and connection to new modalities.



### **Reap the benefits of a single partner**

The IntelliSpace Portal is designed for time savings for clinical users, through tools to help you achieve peak performance across your radiology department. You can take advantage of proactive assistance from our experts, and streamline your maintenance with Philips' remote connectivity services. Additionally, Philips can connect directly with clients to offer on-demand technical and clinical support.



### **One solution for today and tomorrow**

Each year, IntelliSpace Portal introduces both clinical innovation and the latest in IT technology. From WADO data transfer, VMWare scalability and Citrix to multi-site deployment, Philips delivers the technology to help your radiology department deliver. PhilipsService Agreements let you stay current on clinical and hospital IT innovation by routinely updating you with clinical and IT innovations, including education and training services.

\*Please contact your local Philips representative for details on multi-vendor coverage.

# Application overview

## A broad portfolio of clinical depth – all on a single platform

With IntelliSpace Portal, your clinicians benefit from leading applications across a broad spectrum of clinical domains. All are optional additions to the standard features and functionality of the platform. And since the IntelliSpace Portal works on a client-server architecture, these applications are available across your enterprise.

- New application
- Enhanced application

### IntelliSpace Portal 11 – Clinical applications portfolio

Feature	Option	
Standard features and functionality	<ul style="list-style-type: none"> <li>• “Endo” visualization</li> <li>• Filming</li> <li>• Full 2D capabilities, including compare, pan, zoom, scroll, region of interest (ROI), and annotation</li> <li>• Full slab review capabilities</li> <li>• High-priority login for emergencies, regardless of network traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Lossy or lossless compression</li> <li>• Multi Modality Viewing (CT, MR, MI, iXR, US, DXR)</li> <li>• Multiplanar reformations in curved, paddlewheel, and cross sections</li> <li>• Volume rendering</li> <li>• VIP, surface MIP, MIP, minMIP, and average displays</li> </ul>
Multi Modality applications	<ul style="list-style-type: none"> <li>● Zero Footprint Viewer<sup>(1)</sup></li> <li>● 3D Modeling</li> <li>● Multi Modality Advanced Vessel Analysis (AVA)</li> <li>• Filming</li> </ul>	<ul style="list-style-type: none"> <li>• Multi Modality Tumor Tracking (MMTT)</li> <li>• Multi Modality Tumor Tracking qEASL</li> <li>• Multi Modality Viewer</li> </ul>
CT Clinical applications	<ul style="list-style-type: none"> <li>● CT Brain Perfusion</li> <li>● CT Calcium Scoring</li> <li>● CT Comprehensive Cardiac Analysis (CCA)</li> <li>• CT Acute MultiFunctional Review (AMFR)</li> <li>• CT Advanced Vessel Analysis (AVA) Stent Planning</li> <li>• CT Body Perfusion</li> <li>• CT Bone Mineral Analysis (BMA)</li> <li>• CT Cardiac Plaque Assessment</li> <li>• CT COPD</li> <li>• CT Cardiac Viewer</li> <li>• CT Dental Planning</li> </ul>	<ul style="list-style-type: none"> <li>• CT Dual Energy Viewer</li> <li>• CT Dynamic Myocardial Perfusion (DMP)</li> <li>• CT EP Planning</li> <li>• CT Liver Analysis</li> <li>• CT Lung Nodule Assessment (LNA)</li> <li>• CT Lung Nodule CAD<sup>(1)</sup></li> <li>• CT-MI Fusion</li> <li>• CT Myocardial Defect Assessment</li> <li>• CT Pulmonary Artery Analysis (PAA)</li> <li>• CT TAVI Planning</li> <li>• CT Virtual Colonoscopy</li> <li>• Virtual Colonoscopy VeraLook CAD</li> </ul>
CT Spectral applications <sup>(2)</sup>	<ul style="list-style-type: none"> <li>● CT Spectral Viewer</li> <li>• CT Spectral Advanced Vessel Analysis</li> <li>• CT Spectral Comprehensive Cardiac Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• CT Spectral Light Magic Glass</li> <li>• CT Spectral Magic Glass on PACS</li> <li>• CT Spectral Tumor Tracking</li> </ul>
MI clinical applications	<ul style="list-style-type: none"> <li>● NM Mirada Viewer<sup>(3)</sup></li> <li>• NM Astonish Reconstruction</li> <li>• NM Cedars Sinai Cardiac Suite 2015</li> <li>• NM Corridor4DM 2016<sup>(4)</sup></li> <li>• NM Emory Cardiac Toolbox (ECTb) v4.1<sup>(5)</sup></li> <li>• NM Emory Cardiac Toolbox (ECTb) HeartFusion<sup>(6)</sup></li> </ul>	<ul style="list-style-type: none"> <li>• NM Emory Cardiac Toolbox (ECTb) SyncTool<sup>(2)</sup></li> <li>• NM EQuAL<sup>(7)</sup></li> <li>• NM JETPack Application Suite</li> <li>• NM NeuroQ<sup>(7)</sup> 3.75</li> <li>• NM NeuroQ<sup>(7)</sup> Amyloid</li> <li>• NM Processing Applications Suite</li> </ul>
MR clinical applications	<ul style="list-style-type: none"> <li>● MR Cardiac</li> <li>● MR Liver Health</li> <li>• DynaCAD Breast<sup>(8)</sup></li> <li>• DynaCAD Prostate<sup>(8)</sup></li> <li>• MR advanced diffusion analysis</li> <li>• MR Cartilage Assessment</li> <li>• MR Cardiac Temporal Enhancement</li> <li>• MR Cardiac Quantitative Mapping</li> <li>• MR Cardiac Whole Heart</li> <li>• MR Diffusion</li> <li>• MR Echo Accumulation</li> </ul>	<ul style="list-style-type: none"> <li>• MR FiberTrak</li> <li>• MR IViewBOLD</li> <li>• MR Longitudinal Brain Imaging (LoBI)</li> <li>• MR NeuroQuant<sup>(9)</sup></li> <li>• MR MobiView</li> <li>• MR Permeability</li> <li>• MR QFlow</li> <li>• MR SpectroView</li> <li>• MR Subtraction</li> <li>• MR T1 Perfusion</li> <li>• MR T2* (Neuro) Perfusion</li> </ul>
US clinical applications	<ul style="list-style-type: none"> <li>• US Q-App Elastography Analysis (EA)<sup>(5)</sup></li> <li>• US Q-App Elastography Quantification (EQ)<sup>(5)</sup></li> <li>• US Q-App General Imaging 3D Quantification (GI3DQ)</li> <li>• US Q-App Intima Media Thickness (IMT)</li> </ul>	<ul style="list-style-type: none"> <li>• US Q-App Microvascular Imaging (MVI)</li> <li>• US Q-App Region of Interest (ROI)</li> <li>• US Q-App Vascular Plaque Quantification (VPQ)</li> </ul>

<sup>(1)</sup> CAD functionality is not available for sale in the US

<sup>(2)</sup> For use with IQon Spectral CT scanner only

<sup>(3)</sup> Mirada is a registered trademarks of Mirada inc.

<sup>(4)</sup> Corridor4DM is a registered trademark of Invia, LLC.

<sup>(5)</sup> Only available for sale in the US

<sup>(6)</sup> Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

<sup>(7)</sup> NeuroQ and EQuAL are trademarks of Syntermed.

<sup>(8)</sup> Dynacard is registered trademarks of Invivo Corporation

<sup>(9)</sup> NeuroQuant is a trademark of the CorTechs Labs, Inc.



## Leverage the power of a single integrated solution

With just one solution, IntelliSpace Portal 11 connects your entire radiology department. Due to its server-based architecture, all users work with the same software version, and all applications and licenses are handled in one solution.

### **Designed to reduce the likelihood of study retrieval error**

IntelliSpace Portal maintains information about patient demographics to synchronize with the latest HIS and EMR information, and also supports patient reconciliation.

### **Keep information flowing**

Before you start working, the system starts prefetching priors based on the list of patients scheduled for today and the next day. When reading exams using IntelliSpace Portal, you can launch the patient context from the EMR. Once you complete your analyses, you can export patient Reports, including tables and graphs, which may reduce data transfer errors.

### **Keep track of it all**

Help your solution run at peak performance with a set of web-based tools to monitor your installation. Configure alerts are a proactive approach against system performance degradation.

### **Make the most of your hardware through server and client virtualization**

You can also deploy IntelliSpace Portal 11 within your IT infrastructure when you choose the solution's software-only model. This can increase the flexibility of your hardware and help you use it to the fullest.

#### **Server Virtualization**

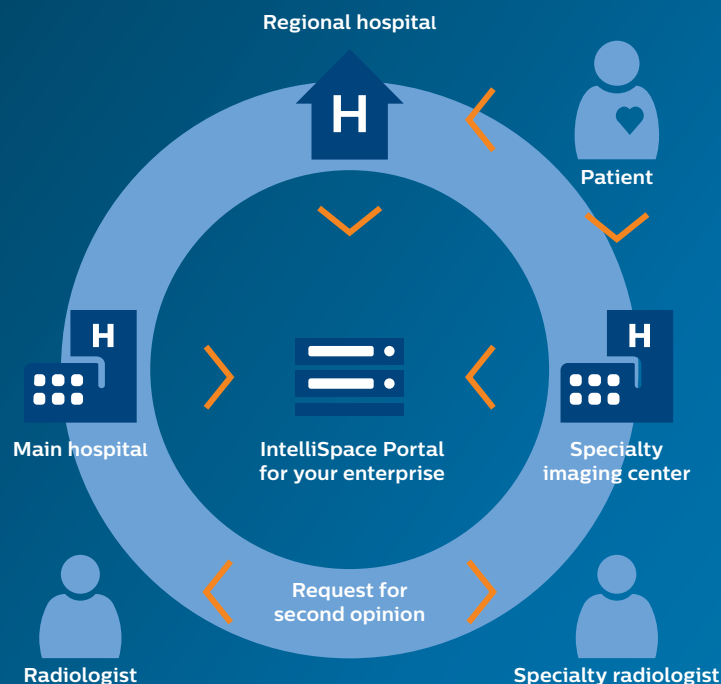
With VMware certification, IntelliSpace Portal runs server-side virtualization on your own server – or Philips provided server infrastructure.

#### **Client Virtualization**

With Citrix certification, IntelliSpace Portal runs Virtual client-side virtualization on your own client infrastructure.







## A single platform connecting multiple locations

Advanced analysis is changing rapidly. It can be anything but simple for an enterprise to leverage the full potential of these developments. IntelliSpace Portal Enterprise lets you work as one across your network, bringing locations and people together. It connects multiple sites to boost productivity and designed to reduce the complexity of resource planning today while preparing you for growth tomorrow.

### Growing with you

Join separate geographical sites with IntelliSpace Portal Enterprise to create common access and workflows. With up to 200 concurrent users\*, it easily adapts when more users and sites come online without interrupting busy workflows. IntelliSpace Portal 11 supports longer data storage of up to 30 TB (cache storage). In IntelliSpace Portal's 11 scalability engine is designed for enhanced reliability and stability.

### Say goodbye to downtime

Patient care can't wait. That's why IntelliSpace Portal features a failover system to help maintain high availability. Should one IntelliSpace Portal server from the single site "farm" go down, another server automatically takes over. IntelliSpace Portal continues working with the remaining portal server's resources.

### Rely on consistent performance

Even at heavy loads, expect IntelliSpace Portal Enterprise to deliver exceptional performance. It balances the load by automatically routing users to the best Portal server on site, based on data type and server load.

\* 200 concurrent users in up to 15 separate sites; Main site up to 20 concurrent users, other sites up to 15.

# Continuous evolution and services

Clinical imaging technologies and approaches are evolving all the time. Turn this change into your advantage with IntelliSpace Portal 11. Designed around the principle of continuous evolution, this platform helps you manage shifting challenges and shape high-efficiency and technology-driven healthcare for the years to come.

### Protect your investment from day one

With Service Agreements, advanced visualization capabilities are adjusted and updated to the specific needs of your enterprise at an affordable cost. Continuous software upgrades, enhancements and hardware updates enhance your return on investment. They also help maintain your hospital's investments with predictable pricing and obsolescence protection.

### Maintain your clinical and operational standards

Tomorrow's already planned for with Service Agreements, connecting you to a steady stream of innovations, expanding and deepening your clinical coverage. Clinical education and training services show you how to apply these advances to patient care and make the best use of your solution. Professional support teams are available

for rapid telephone and remote support, as well as on-site assistance where needed. Furthermore, Philips helps you minimize disruptions and proactively resolve potential incidents with our Event Management remote monitoring technologies. Philips' Service Agreements include automatic software updates and upgrades. With scheduled hardware upgrades, you can be confident your software and hardware work together. With one system to update, IntelliSpace Portal 11 brings simplicity to a complex environment. The platform is updated through the server, and you can scale the solution as your organization grows while reducing the need to have multiple workstations. It can also reach throughout your enterprise as an application server interfacing with PACS, EMR and RIS systems.

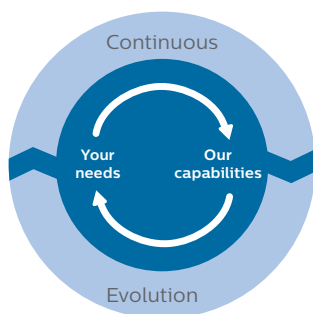
### The key benefits of Philips services solutions

Obsolescence protection	The pace of technology is very fast, but investments will not become obsolete year by year
Financial considerations	<b>Lower total cost of ownership</b> for dealing with rotation of staff (training), pace of technology (software and hardware upgrades), and support <b>Predictable costs</b> operationalized through budgets instead of capital expenditure
Clinical and workflow advancement	<b>Continuous evolution of clinical depth</b> in applications, workflow performance (speed and power), and IT integration

### Your partner in patient care

When you choose Philips, you're investing in a long-term relationship. We're committed to partnering with you to realize the full clinical and operational potential of your IntelliSpace Portal 11. Our product portfolio is just one example of our growth and change to meet your changing needs. Our solutions provide deep clinical insights, global delivery capabilities, and a broad spectrum of services. Turn to Philips for clinical guidance, technical phone support, remote problem resolution, on-site support and implementation services, business improvement consulting, flexible payment options, and more.

Please check with your local market representative about other Service Maintenance Agreements if RightFit is not yet available in your market. For additional details, please refer to the terms and conditions applicable to your market.



Make the most of your investment in your IntelliSpace Portal 11 with our all-inclusive RightFit Service Agreements. Based on customer insight, they're structured around your service challenges and business priorities.

### Key components of continuous evolution with our service offering\*

#### Continuous evolution

**Software upgrades** – In a constant cadence (usually every 18 month) Philips will provide a new version of IntelliSpace Portal software. Throughout the major releases, Philips also provides updates when they are available.

**Installation Services** – Philips will provide for either on-site or remote installation of the software upgrades and updates for the duration of the service agreement. Moreover, Philips provides professional services, installation, and implementation, including supported PACS, RIS, and third-party integrations.\*

**Software updates** – all IntelliSpace Portal updates, including emergency fixes, minor releases, complete with consulting on implementation.

**Software updates installation** – Philips will provide for either on-site or remote installation of the software update.

**Hardware support and refreshment** – customers' hardware will be replaced once in every five-year agreement and customers receive on-site hardware support provided hardware has been supplied by Philips. Only available with RightFit protection extended agreements.

#### Continuous education

**Continuous education** – customers receive necessary clinical education and IT system admin education as part of the service offering, and online IntelliSpace KnowledgeScape education.\*\*

#### Supplemental services

Customers can benefit from additional service days, extended coverage hours and 24/7 technical support (only applicable in certain markets), optional IT and clinical services and consultation.

\* Services and availability may be dependent on local market. Check with you representative for more information

\*\* Requires client remote, secured connection similar to the server connection with Philips remote services.





# System specifications and requirements

## IntelliSpace Portal 11 configurations

### Server hardware specifications

- Dell PowerEdge servers:
  - Dell PowerEdge R640 Rack server
  - Dell PowerEdge T640 Tower server

### Server power requirements

Dual power supplies for 120–240V AC

### Server software specifications

- Windows® Server 2012 R2 Enterprise & Standard Edition  
Philips IntelliSpace Portal server software, including:
  - Proprietary Portal Server Application
  - Clinical application usability and IT Dashboard
  - IntelliSpace Portal management application for managing user database and additional settings
- McAfee® antivirus software
- Networking
  - TCP/IP protocol only
  - Gigabit network card(s)
  - Static IP address
- Security
  - No unused Windows® services running
  - No shared drives
  - Windows® access control defined by client (hospital site IT)
  - Encrypted users/groups database file
  - User management application available only to defined Portal administrators
  - Encrypted transfer over the network of username and password information
  - Event logging

- Windows® firewall

- Administrative access through server console or remote desktop

### Client software requirements

Supported operating systems:

- Windows® 7 (32 and 64 bit)
  - Windows® 7 requires an administrative account for initial installation
  - Windows® 8 (32 and 64 bit) The new versions of 3rd party cardiac applications support Windows® 8, also NeuroQ 3.6 with proper settings
  - .NET® framework 4.7.1 or higher
  - Windows® 8, 8.1 (32 and 64 bit)
  - Windows® 10 (32 and 64 bit)
  - Ability to add the IntelliSpace Portal to the firewall exception list
  - Additional software recommended (for optional functionality):
    - Adobe Acrobat Reader (for Reports and Help)
    - Adobe Flash Player (for online training applications)
    - Windows® Media Player 9.0 or above (for saving movies)
    - IMAPIv2 (for burning CD/DVD)
    - Browsers: IE, FireFox, Chrome latest versions
- Virtualization supported:
- Citrix Xen Desktop version 7.8 and backwards compatible until versions up to 7.1.
  - VMware Horizon VDI solutions



## Server VM specifications (for deployment on customer site)<sup>(1)</sup>

Virtualization supported:

- VMware vSphere 5.1 – 6.7 OS (Pre-installed by Client):
- Windows® Server 2012 R2 Enterprise & Standard Edition
- English Locale .NET version installed 3.5
- Storage – Two local virtual drives required (2000 IOPS):

1.Drive C (OS + apps): 95GB

2.Drive D (Data): 0.5 – 5TB

- Network:
  - At least 1Gbps
- Antivirus:
  - Either use preinstalled McAfee antivirus or install one of the others after Portal is installed:
  - Symantec Endpoint Protection
  - Trend Micro OfficeScan

Concurrent users	Number of Cores	RAM [GB] <sup>(2)</sup>
1	6	12
3	8	16
5	8	24
10	12	32

## Network requirements

Dedicated 1 Gigabit/S connections between IntelliSpace Portal servers (in case of a multi-server deployment)

- LAN Network bandwidth 100 Mbit/S and above (1 Gigabit/S or above recommended)
- VPN access (optional)
- Domain based network environment (recommended)

## Recommended remote or home connection specifications

Network bandwidth and latency: 5 Mbit/s or above download speed, 512Kbit/s or above upload speed, with latency <20ms

- Network bandwidth/latency for MI 3rd Party Applications (AutoQuant, Corridor4DM v2013, ECTb, NeuroQ): 100 Mbps download/10 Mbps upload with <10ms latency.

## IntelliSpace Zero Footprint Viewer<sup>(3)</sup>

Supported on OS X 10.10 and Windows® 7,10 using: Internet Explorer, Chrome, Edge, Safari.

<sup>(1)</sup> Various VM sizes related only to non-Spectral installations.

<sup>(2)</sup> This table describes the minimum RAM/CPU requirements for the selected level of concurrency.

<sup>(3)</sup> Zero Footprint Viewer enables viewing and sharing – not intended for diagnosis.

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## Client hardware requirements<sup>(1)</sup>

Screen resolution: 1280 x 1024 or above (recommended) or 1024 x 768 (minimum)

- Minimum screen resolution for MI applications: 1280 x 1024
  - Up to 3 megapixel monitors are supported
  - No support for monochrome or grayscale-only monitors
  - 96 DPI
  - 24 bpp (or higher) color depth monitors
  - Dual monitor capability requires adequate support of client display card and driver.
- The client machine should also support a graphic card with the following requirements:
  1. Native DirectX 9.c support
  2. Native GDI+ Support
  3. Native Windows® Aero interface support
  4. 128MB RAM (for the graphic card)
- Processor (CPU minimum): 2 cores @ 1.8 GHz / 4 cores @ 1.6 GHz

- Processor (CPU Minimum for NM applications and/or when other applications are running in parallel): 3 Cores @ 2.8 GHz / 4 Cores @ 2.4 GHz
- Processor (CPU recommended): 3 Cores @ 2.8 GHz / 4 Cores @ 2.4 GHz
- Memory (RAM)
  - Minimum: 2GB RAM
  - Minimum: 4GB RAM for clients also running PACS
  - Minimum for MI Applications and/or when other applications are running in parallel: 4 GB RAM
  - Recommended: 8 GB RAM or above
- Network adapter speed: 100 Mbit/s or above
- Free disk space on C: drive: 3 GB or higher:
  - Additional 5 GB of free disk space required to burn DVDs
- 3-button mouse
- Additional 15 GB of free disk space are required in order to install iXR client

<sup>(1)</sup> The minimum requirements specifications are the estimated minimal specifications required to run the IntelliSpace Portal client. If your computer has less than the "minimum requirements," you will not be able to properly install or use the IntelliSpace Portal client. Actual requirements will vary based on the IntelliSpace Portal application you run and other software applications you run on the system in parallel with the IntelliSpace Portal client (such as PACS/RIS, client, Dictation software). For optimal performance of the IntelliSpace Portal client and typically on clients where additional applications are expected to run in parallel to the IntelliSpace Portal client itself (such as PACS/RIS client, Dictation software), clients are required to be equipped with stronger HW specifications beyond the minimum specifications (RAM and Processor) to allow optimal performance of the IntelliSpace Portal client in parallel to other software applications running on the client system.

## Server configuration concurrent user support<sup>(2)</sup>

Tailor your IntelliSpace Portal solution to your specific needs with resource-based licensing. Specify how many concurrent users – between one and 200\* – may access your system from any PC at the same time to maximize the value of IntelliSpace Portal 11. Each added user will be able to take full advantage of your solution.

\* 200 concurrent users in up to 15 separate sites; Main site up to 20 concurrent users, other sites up to 15.