

AURORA **mScope**®



***Digital Pathology Image Management  
Solutions***

***Healthcare, Biomedical Research and  
Education***

***Online, Anywhere, Anytime***

# Today's Agenda (Cadiz)

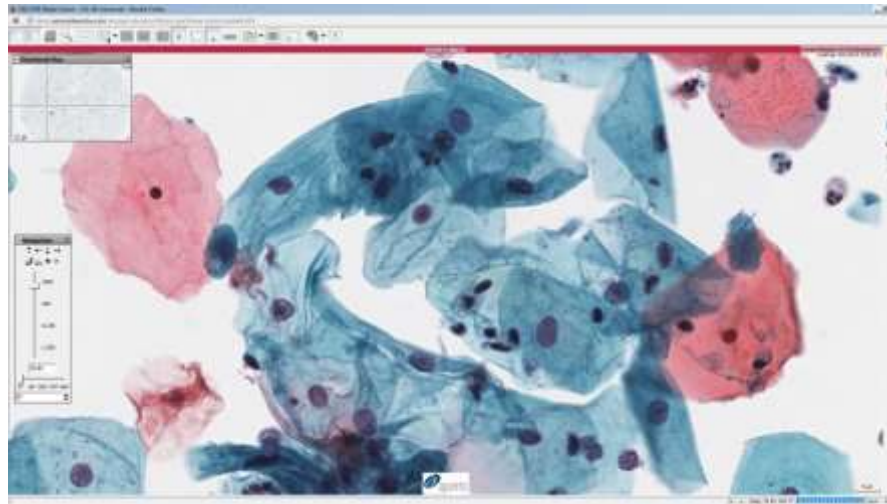
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Who is Dr. Erik Yeo

Who is Aurora mScope?

Aurora's perspective of digital pathology development

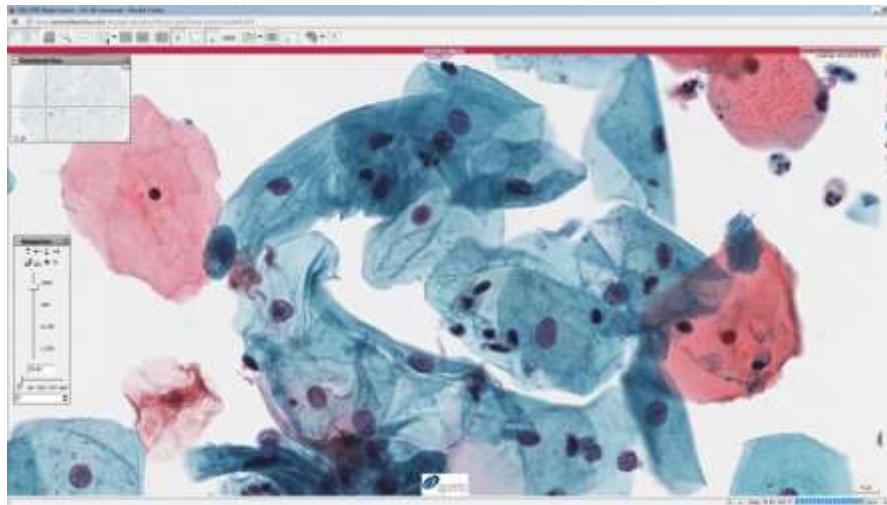
What are the features in any DP solution that end-users should be considering?



# Erik Yeo MD FRCPC

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- CEO and CMO of Aurora mScope (2005-pres)
- Professor of Medicine
- University of Toronto
- University Health Network
- Hematology, Oncology and Laboratory Medicine



# Who is Aurora mScope?

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- Canadian software company, focused solely on digital microscopy, whole slide images (WSI) and digital pathology software solutions (since 2005)
- Innovative, web-based software applications for WSI viewing, image file management and communication around digital microscopy images and other medical (DICOM) images
- We are not an end-end DP solution or scanner company but are experts in digital WSI management, communication
- Our software development philosophy is summarized in:
  - Universality
  - Inter-operability
  - Flexibility and Open architecture (plug and play objective)
  - End user-oriented development and collaboration
  - Web-based “cloud” technologies
- Networks in 12 countries including France, Canada, United-States, Austria, Spain, Holland, Africa, Asia, over 15,000 users served from 63 individual sites
- Image management solutions for SEAP and this conference
- Proven Clinical Telepathology, Research/Pharma and Educational Digital Microscopy Solutions

# Universal and Inter-operable Solutions

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*Hardware: Flexible choices*

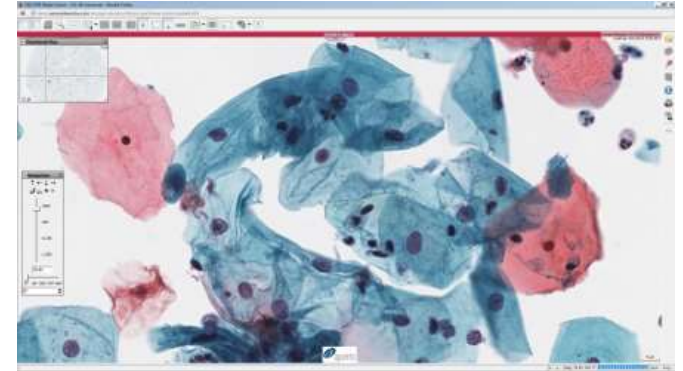
*DOS*

*MAC*

*Linux*

*tablets*

*smart-phones*



*Flexible, fast, simple and secure access to images, applications and associated case materials*

*within institutions*

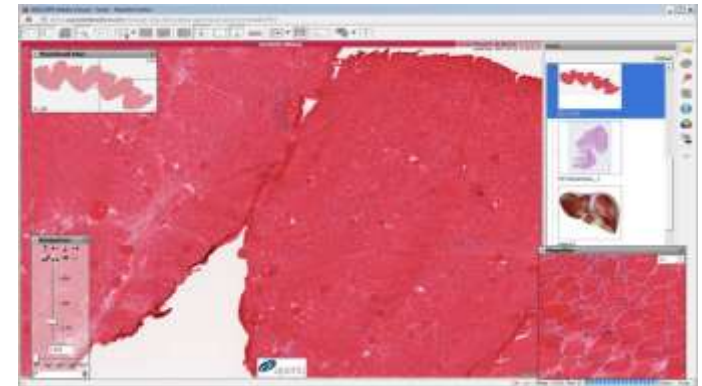
*outside institutions (home, with travel)*

*cloud/web-based solution*

*optional desktop-based solution*

*multi-level security*

*fully regulatory compliant*



# Universal Image Viewer

*Don't Be Restricted By A Single Scanner Image Format/Solution*

*Image scanner vendor and WSI format neutral or agnostic viewing solution*

*DICOM*

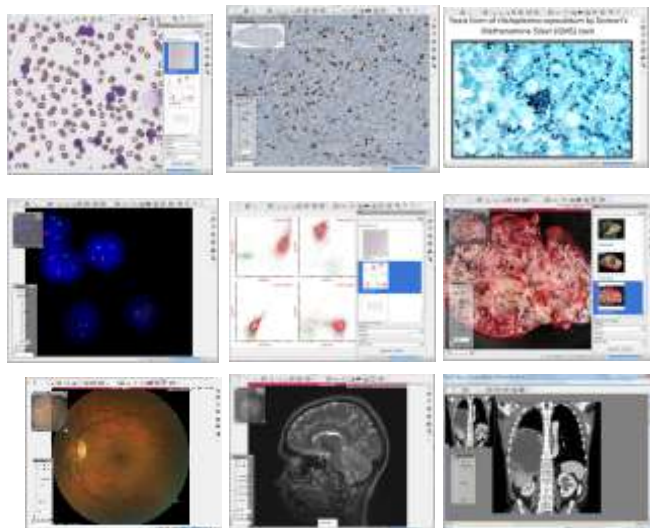
*3D or Z-stack,*

*View other image types*

*Annotations (POI)*

*Multi-Ch IF*

*Split panel images*



*If there is an e-slide image format out there we can generally view it*

**mScope®**

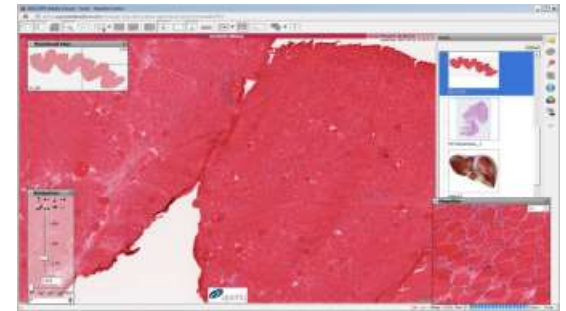
# Universal and Inter-operable Solutions

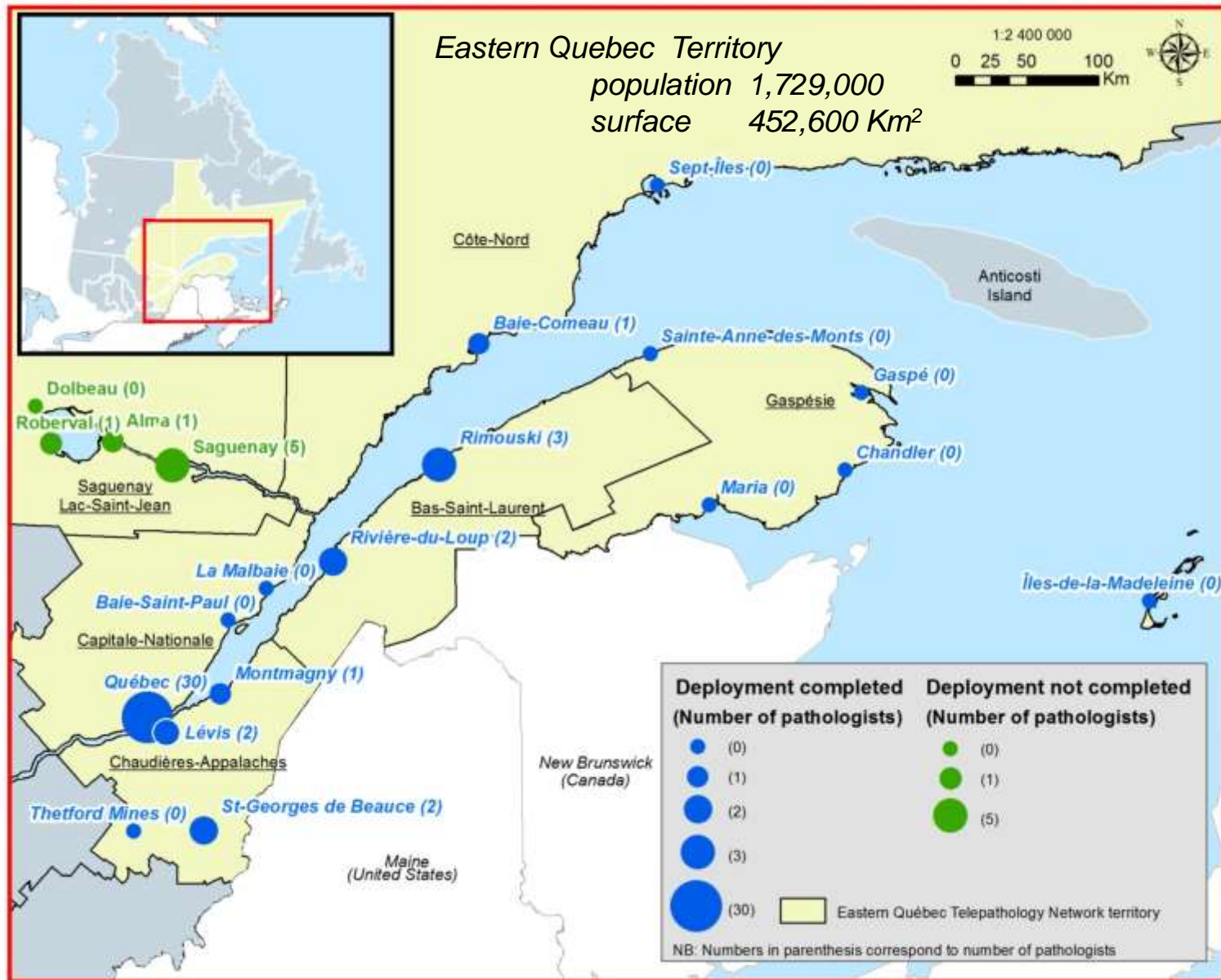
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Open architecture software solution:

So you can select best-of-breed of other solutions and platforms for integration into your management system :

- Plug-in any slide scanner
- Integrate anyones image analysis and artificial intelligent solution
- Integrate macro “grossing” station for distant tele-pathology
- Laboratory information systems
- Electronic Patient Record (EPR)
  - Enhances pathology relevance and visibility
- The ability to do this starts with how your software was developed and whether it is developed as an open system with integration in mind





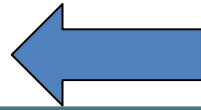
Reference: Géobase

Realised by : Pierre-Louis Tétu



# Sept-Iles

Technologist

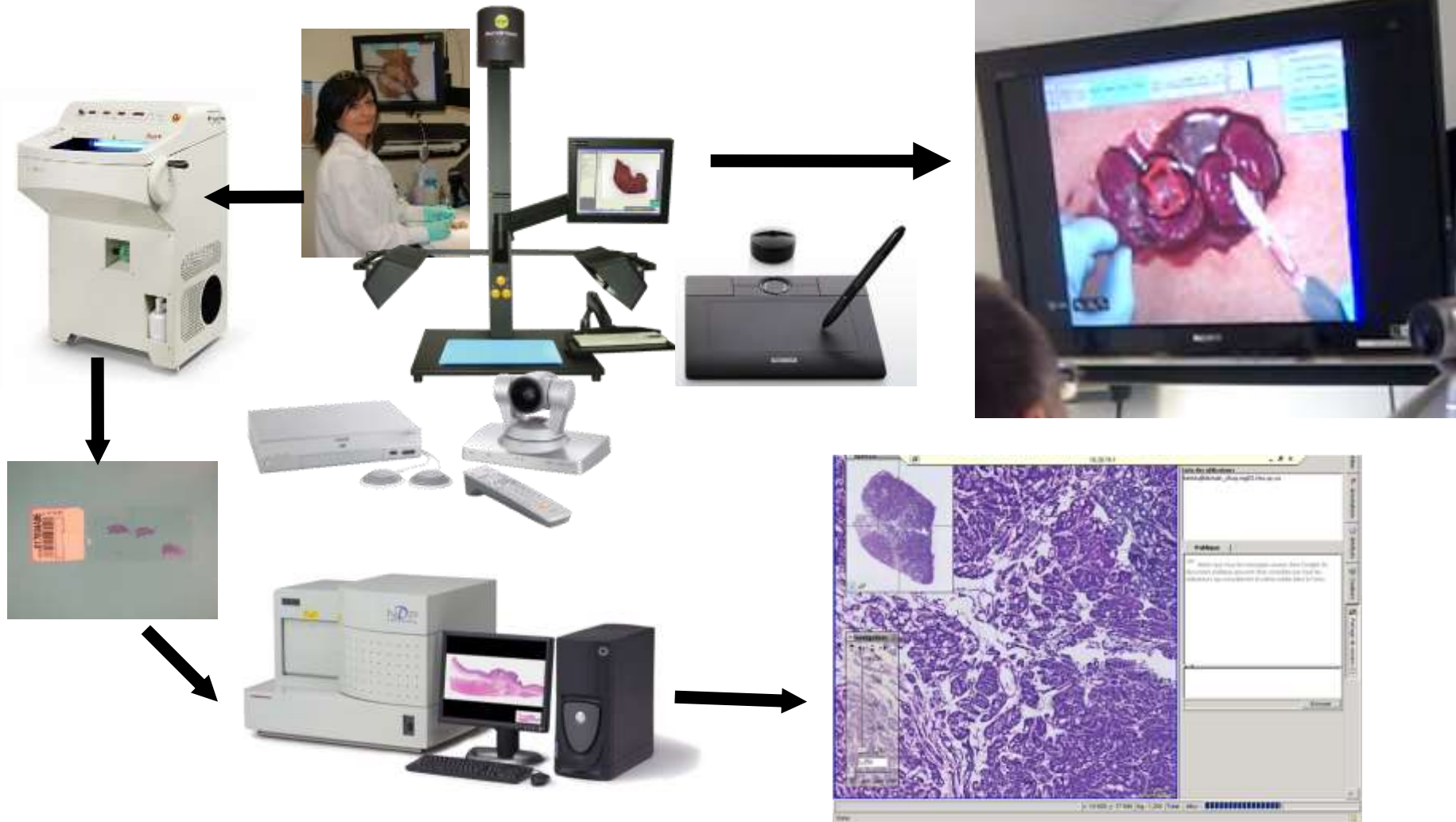


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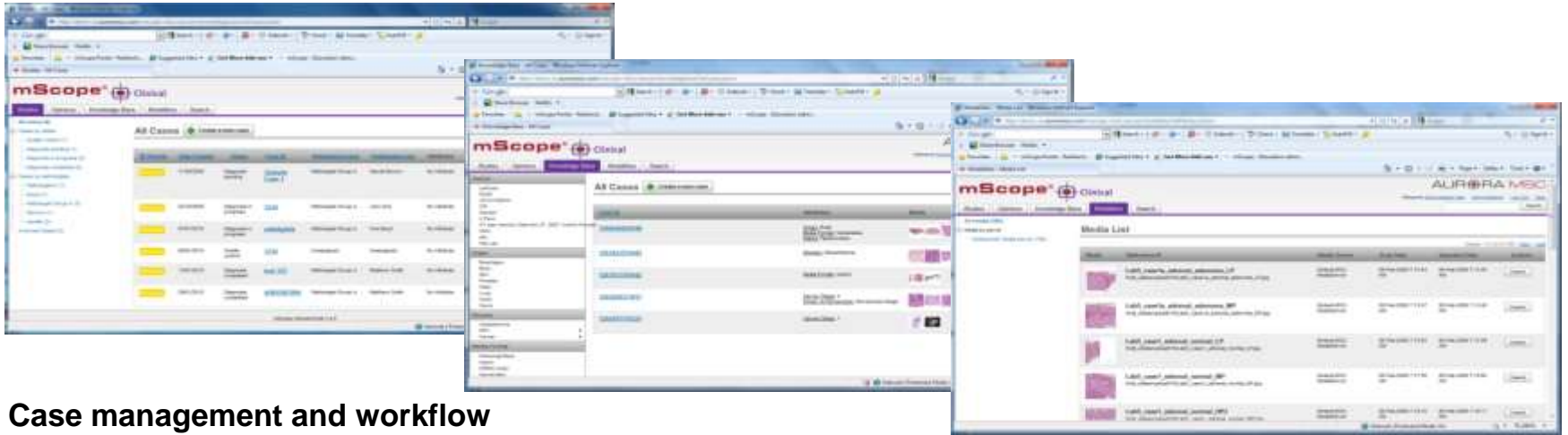


# Quebec City

Pathologist



# Flexible Clinical Solutions: Collaboration, Sharing, Analysis



- **Case management and workflow**

- Flexible, configurable workflow solutions (workflow engine)
- One workflow solution does not fit all pathologists
- Automated linked case data i.e genomics, image analysis, spectral analysis, other informatics

- **Optional Reporting solutions** : integration into LIS or stand alone reporting solutions (commercial consultation)

- **Built-in information exchange and sharing solutions:**

- Automated Email notifications for workflow and reporting
- Real-time image sharing between colleagues (think online multi-headed microscope)

# *Image Analysis and AI Integration*

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**DEF:NIENS**<sup>®</sup>  
Understanding Images

 aperio

**mScope**<sup>®</sup>

**MATLAB**<sup>®</sup>  
*The Language of Technical Computing*

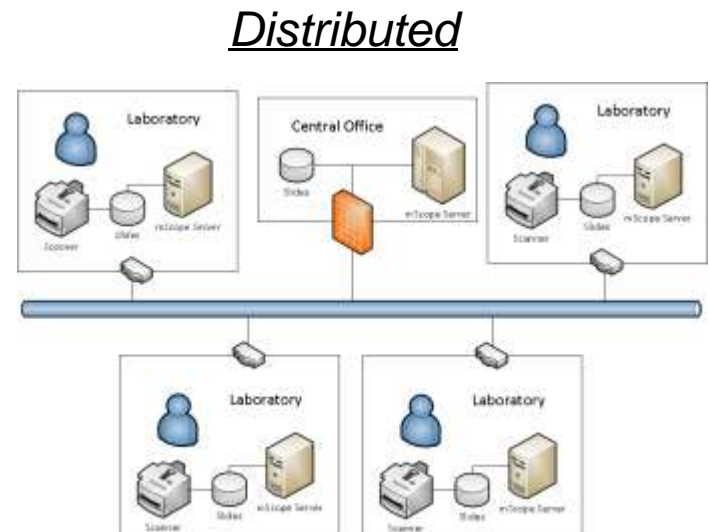
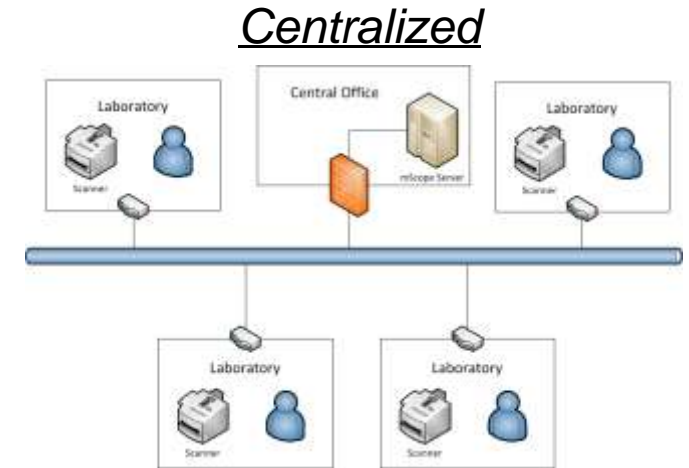
 ADCIS

**visiopharm**  
TURNING IMAGES INTO KNOWLEDGE

Open solutions so that you can simply and cost-effectively plug-in or change

# Architecture "Flexibility"

- Flexible Architecture Options
  - Centralised Server Solution
  - Distributed Server Solution
  - Hybrid Server Solution
  
- Our experience and expertise with tailored multi-site solutions
  - Centralised (REFCOR)
  - Distributed (Serendipia, RUIS-UL)
  - Hybrid (IDEXX, Conticanet)



# Conclusion

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- ✓ Universal Viewer
- ✓ Flexible User oriented solution
- ✓ Web/Cloud based solutions
- ✓ Open hardware solution:
  - All connected devices (PC, Tablet, telephone) on all platforms (Windows, Mac, iOS, Android)
- ✓ Interoperable:
  - scanners, image formats, analysis and intelligence, LIS, EPR etc.)
- ✓ Collaborate, communicate and simply share information
- ✓ Flexible Architecture Solutions:
  - Centralised, Hybrid and Distributed
- ✓ Secure, Compliant and Scalable

