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**FOR RELEASE JULY 15, 2010****LEAD TECHNOLOGIES RELEASES V17 OF MEDICAL PRODUCTS****V17.0 Adds Medical 3D Construction and Rendering, Silverlight Class Libraries and Controls, and Updates to Image Viewer and PACS Framework**

**Charlotte, NC (July 15, 2010)** - LEAD Technologies, Inc. is proud to release Version 17 of LEADTOOLS Medical Imaging, PACS Imaging and Medical Imaging Suite SDKs. LEADTOOLS 17 is an extensive offering of new imaging technology and enhancements and is especially suitable for software developers looking for advanced imaging features and tools for rapid development with the stability, performance and support LEADTOOLS customers have come to expect.

**New Silverlight Class Libraries and Controls**

LEADTOOLS 17 is optimized to support 100% pure Silverlight development. Most LEADTOOLS functionality including image format loading and saving, image processing, compression, displaying, effects and annotations can be used in Silverlight without external dependencies or server calls.

- New **Silverlight DICOM dataset** support. Create, load, view, edit and save DICOM datasets including pixel data, elements and annotations in Silverlight clients.
- New **Silverlight viewers**. Image viewer, image list, pan window, and magnifying glass pixel shader.
- New **Silverlight formats**. Load, save and convert more than 100 formats and subformats including TIFF, JBIG, JBIG2, IOCA, FAX (CCITT Group3/4), JPEG 2000, JPEG, BMP, CALS, GIF, PNG, TGA, DICOM, and EXIF in Silverlight clients.
- New **Silverlight image processing** functions. Process images on Silverlight clients with more than 130 advanced image processing functions including bicubic and favor black resize, border, dot, hole punch and line removal.
- New **Silverlight annotations**. Load, save, create and edit image annotations (markups) in Silverlight clients. Annotation object types include Rectangle, Ellipse, Highlight, Line, Redact, Text, Ruler, Protractor, CrossProduct, Image, TextPointer, Point, Curve, Point, Polygon and Polyline.
- New **Silverlight pixel shaders**. Apply visual effects in Silverlight clients with more than 150 pixel shaders.

"LEADTOOLS 17 marks the completion of a major milestone in LEAD's Silverlight development roadmap," said Gabriel Smith, Marketing Manager at LEAD Technologies. "Armed with more than 20 years of imaging expertise and the experience of working with tens of thousands of developers world-wide, we are porting all LEADTOOLS functionality to Silverlight, putting higher priorities on the features our customers request the most. Based on those requests, this upgrade includes a vast number of basic and advanced image features, some of which no other "pure" Silverlight SDK can claim. The Silverlight functionality in LEADTOOLS greatly expands what is possible for imaging developers who would otherwise use only Visual Studio."

**Updates to the LEADTOOLS High Level PACS Framework**

The LEADTOOLS High Level PACS Framework requires very little knowledge of the internal workings of DICOM communications. Because the framework handles all of the low level communications, developers are free to devote more time to user interface and database queries. Still, developers have access to the low level DICOM communications layer, providing the power and flexibility to handle any situation. The LEADTOOLS 17 update adds several new and powerful components to the already comprehensive list of framework features:

- New **DICOM Router components**. Route images to one or more PACS based on user-defined business rules.
- New **DICOM Work List components**. IHE compliant server and client components for Modality Work List (MWL), Modality Performed Procedure Step (MPPS).
- New **DICOM High-Level Storage, Query and Retrieve Services components**. IHE compliant server and client components for DICOM Storage, Query and Retrieve services.

**Updates to the LEADTOOLS High Level PACS Workstation Framework**

The LEADTOOLS High Level PACS Workstation Framework is a set of .NET PACS components that can be used to build a full featured PACS Workstation application. To speed development and leverage LEAD's experience of working with thousands of developers, a medical workstation viewer application with source code is included. New features added to the framework include:

- Create, manipulate and render 3D volumes from DICOM stacks.
- Cut-plane on 2D DICOM slices to generate 3D volumes with interactive support for positioning, orientation and volume thickness.
- DICOM series reference line and orientation tag support.

- Enhanced Workstation listener service logging and new event log viewer.

### **New LEADTOOLS Print to PACS Application with Project Source Code**

The LEADTOOLS Print to PACS application captures images and documents in multiple ways, associates the captured data to studies on PACS and stores the captured data to PACS as secondary capture or DICOM Encapsulated PDF object.

### **New LEADTOOLS Medical 3D Module**

With the LEADTOOLS Medical 3D Module, developers can create applications to construct and view 3-dimensional volumes from sets of homogenous 2-dimensional medical images. LEADTOOLS provides several rendering methods and tools for advanced visualization including MPR, VRT, MIP, MinIP and SSD. Viewing options include planes, clip, slab, scale, zoom, threshold, image processing, and full camera control. 3D rendering can be stand alone or hosted in the high-level LEADTOOLS Medical Image Viewer control to leverage the built-in tools and automation provided by the LEADTOOLS viewer control.

### **Updates to the LEADTOOLS Medical Multimedia Module**

The LEADTOOLS Medical Multimedia SDK Module adds LEADTOOLS Multimedia SDK and a collection of state-of-the-art DirectShow filters for compressing and decompressing video and audio data inside DICOM files to LEADTOOLS Medical and PACS Imaging SDK products. This feature-rich product is designed to eliminate the complexity from converting cine images and video streams to DICOM objects including X-ray Angiography (XA), Ultrasound (US), Visible Light (VL), Secondary Capture (SC) and much more. The LEADTOOLS Medical Multimedia SDK Module utilizes the most advanced compression algorithms used in the industry and approved by the DICOM standard including MPEG-2, HD MPEG-2, Motion JPEG, and Motion JPEG 2000.

"We realize that that the healthcare industry is growing at an incredible rate. Hospitals and practitioners are storing and streaming an ever growing amount of multimedia content, making high performance compression technology essential. These demands were a number one priority in our latest version," said Otis Goodwin, Developer Support Manager at LEAD Technologies. "Not only have we again pushed the compression performance envelope even further with this release, we have ported our entire lineup of DirectShow codecs and filters to 64 bit. With the addition of a .NET multimedia interface, LEADTOOLS V17 is the most comprehensive multimedia toolkit available, providing developers with everything they need to create rich, high performance multimedia applications."

### **New Medical Image Processing Functions**

- **Tissue equalization** function to enhance x-ray images by performing equalization between hard and soft tissues.
- **Anisotropic diffusion** function to enhance medical images by removing noise while maintaining image integrity.
- **Auto segment image processing** function to automatically segment CT and MRI images by shrinking a defined rectangular region onto objects in the image.
- **Mean shift image processing** filter to enhance images based on the color distance of a pixel and the pixels in a radius of inspection.

### **Additional Updates**

- New **DICOM dataset editor** utility.
- Import and export **DICOM to XML** to easily edit and compare DICOM datasets.
- Up to date **DICOM IOD tables**.
- New support for the **Analyze medical file format**.
- New **Visual Studio 2010 projects**.
- New **.NET 4** class libraries.

### **Other Products**

Other LEADTOOLS SDK products specific to the [Document](#) and [Multimedia](#) developer markets are also being upgraded to version 17 and offer their own exciting new features. To learn more about what is new in Version 17.0 visit <http://www.leadtools.com/corporate/new-in-v17.htm>.

LEADTOOLS version 17 adds important new features and enhancements for several vertical markets and utilizes advanced development platforms available. LEAD reinforces its position as the world leading developer of imaging and imaging related SDKs. LEAD is dedicated to being the only choice for developers who want a comprehensive and time-tested imaging SDK that stays at the forefront of new imaging technologies and development paradigms. For more details on any of the new features included with LEADTOOLS version 17, contact [support@leadtools.com](mailto:support@leadtools.com).

## **About LEAD Technologies**

Since 1990, LEAD Technologies, Inc. is a global leader in the imaging developer toolkit market, providing programmers with feature- rich tools to "image-enable" software applications. LEAD Technologies pioneered the fastest software-only image compression and continues to lead the field in advancing new imaging technologies and offering those technologies to programmers worldwide.

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