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Introduction to Scala 5 Release 6

Welcome to Scala 5 Release 6. This User’s Guide Update will give you an overview of what’s new in Release 6 for Designer, Content Manager, Player and Ad Manager beyond what is already covered in the Release 5 User’s Guides.

Among the headline features for Release 6 are:

- Active Directory / LDAP authentication support
- Support for H.264 and MPEG-2 streaming video
- Support for select HD video-capture devices
- Improved user-interface in the Designer application
- Rich new visual effects for text and other elements
- Content Manager server statistics

IMPORTANT - You really need to know this!

- Release 6 does not support Microsoft Windows 2000. Release 5.1 and its hot-fixes are the last releases supported under this operating system.

- Release 6 does not support Microsoft SQL Server 2000 as an alternative database for Content Manager. You will have to migrate to Microsoft SQL Server 2005 or newer before installing Release 6 or beyond.

- Some functions and commands in our Scala Scripting language have had changes to their syntax. Scala Scripts created in earlier releases and loaded into Release 6 may look slightly different due to the enhancements in the scripting engine - particularly with regards to shadow. Scala Scripts created in Scala 5 Release 6 may not play correctly on Players running earlier releases. It is therefore recommended that scripts are first reloaded, tested and if necessary republished.

- Release 6 Content Manager ships with PostgreSQL 9.0.4-1, Tomcat 5.5.33, and Java runtime 1.6 Update 26. If you are running older releases of Content Manager it is highly recommended that you update these 3rd party components before updating your network to Release 6.

- As always, it is recommended that before embarking on updating your system that a full backup be taken and verified. For more information with regards to making Backups please consult your User guides.
**Product Updates**

Release 6 consists of new versions of the entire Scala 5 product line including Content Manager, Ad Manager, Designer, Player, and various EX Modules. Assuming your “Scala Advantage” software maintenance plan is still active, these updates may be downloaded from [http://www.scala.com/updates](http://www.scala.com/updates).

**Rule #1**: Take and Verify backups

**Rule #2**: See Rule #1.

[https://license.scala.com/readme/Updating.html](https://license.scala.com/readme/Updating.html)

This link has all the instructions you need to carry out the following tasks:

- Obtaining Current Updates of Scala Software
- Update Eligibility
- Apply Scala Updates in the Correct Order
- Remote Update of Scala Players
  - Scala Player Remote Updater
  - Python Remote Updater for Scala Players
  - Video Codecs Remote Updater for Scala Players
- Keeping Other Software Up to Date
  - Windows Update
  - Apache Tomcat
  - PostgreSQL
  - Java Runtime
- Remote Firmware Update of IAdea Media Appliances.

**Product Release Notes**

Release notes are available online [https://license.scala.com/readme/ReleaseNotes.html](https://license.scala.com/readme/ReleaseNotes.html)

Not only do they contain the latest information, but they also contain practical information on the following subjects:

- How to customize Scala 5 through advanced settings.
- How to perform data integration using ScalaScript, Windows Scripting, and Web Services
Reminder of Features and Benefits of Release 5.1 Series

As a reminder, Scala 5 Release 5.1 Series added several important new features, as well as performance improvements and fixes. Some of those highlights include:

- Support for Windows 7 both 32-bit and 64-bit editions.
- Support for Windows Server 2008 R2.
- New transition effects and improvements in the Transitions panel including: searching by name, recently used transitions, and a transition visualizer.
- Improved playback audit reporting features for integration.
- Reserve disk space feature on Players.
- In templates, you can make sounds into data fields.
- Support for displaying templated messages on IAdea media appliances.
- Simplified pairing of IAdea media appliances.

For more details on these please reference the release notes and the 'What's New in 5.1' guide.
What’s New in Scala 5 Release 6 Designer/Player

New Look- New Feel – Graphical User-Interface

To support the rich new visual effects found in Release 6 for text and other elements described later in this section, Scala Designer’s interface is undergoing a transformation to greatly improve the layout and cohesiveness of the existing controls, while adding support for all the new graphical options. Creating content in Designer is not only more flexible than before, but even easier.

Popup Effects and Options

Selecting the color chip of the Face, Outline, Shadow, Backdrop, Bevel, etc. not only allows you to specify the color, but also the three new fill options: Color Gradient, Image, and Tile.

Effect options are now accessible by selecting the up arrow next to the color chip.
Rich New Visual Effects for Text and Other Elements

Gradient, Image, and Tile Pattern Fills
It is now possible to apply three new fill patterns to the surface of text, shadow, outline, backdrop or bevel of any object type. An artist can readily create text that looks like chrome, rough metal, rainbows, smoke, fire, or other effects.

Soft Outlines
The options for contour outline now lets you control the softness and opacity, which can be used for various effects including a glowing outline.

Note: As with other effects the Outline can have a fill type of: Solid Color, Color Gradient, Image or Tile
Soft Shadows
The options for shadow allow you to create a soft, natural-looking shadow, and to tune its color, darkness, direction, and softness.

Note: As with other effects, the Shadow can have a fill type of: Solid Color, Color Gradient, Image or Tile
Opacity Gradients

It is now possible to apply an opacity gradient (transparency) to the surface of text, or to the shadow, outline, backdrop or bevel of any object type.
Effects Combinations
Naturally these new features can be used in a variety of combinations to create stunning dynamic visual effects:
Support for H.264 and MPEG-2 Streaming Video

To augment support for playback of MMS streams, Release 6 now supports two additional video streaming formats:

- H.264 streams
- MPEG-2 streams

**Note:** At this time streams with AC-3 audio are not supported

Stream / Transport Types

- Streams may be live (“join in progress”) or on-demand
- Various transports (RTP over UDP, RTP over TCP, etc.)
- Unicast or multicast

Playback of MPEG-2 program streams and transport streams over RTSP/RTP is now supported. Playback of H.264 transport streams over RTSP/RTP is now supported.

**Note:** At this time there is no support for DRM-enabled streams.
**HD Video-Capture Devices**

Release 6 supports, via the optional TV Tuner EX, the following HD capture cards.

- Datapath RGB E-1
- BlackMagic Intensity Pro

These cards can accept a high-definition component video signal at 720p or 1080i resolution, and can capture unencrypted HDMI at up to 1080p/1080i respectively.

**Note:** Many devices now have HDMI ports, however, if the HDMI signal is encrypted using HDCP, then these sources cannot be captured. As alternative many devices that can output HDMI can also output Component video, in 480p, 720p, or 1080i resolution. The component video standard does not allow encryption, so this will often be the preferred output to feed into an HD TV Tuner device.

**Note:** Licenses for this optional TV Tuner EX are required for both Designer and ALL players that are expected to capture and display the signal.

**Playback Watchdog**

Since Release 5, Content Manager and Player know the expected duration of most media items including:

- Images
- Video files
- Audio files
- Most ScalaScripts

The Playback Watchdog will start a timer before each media item, and if the Player has not moved on after the expected amount of time (plus a margin of safety), Player will report the problem to Content Manager, where it will appear in the Player Health screens and optionally, trigger an email alert.
What’s New in Scala Content Manager

Content Manager Server Statistics
Administrators can now access the new Server Statistics screen with graphs and tables showing key statistics including, but not limited to, memory use, CPU usage and HTTP connection information.

Flexible Bandwidth Throttling
In Release 6 Network Settings you can now specify multiple time intervals where bandwidth rates can be throttled.

![Graphs and tables showing server statistics](image)
Active Directory / LDAP Authentication Support

In Release 6, Scala Content Manager 5 integrates with Microsoft’s Active Directory or LDAP servers for user-authentication (verification of username / password) from the central directory servers.

This enables capabilities such as:

- Centralized password management
- Centralized enforcement of password rules (e.g., minimum password complexity, mandatory password change every 30 days, etc.)
- Centralized disabling / enabling of user accounts

Note: Scala Content Manager does not currently obtain user-rights information (Authorization) from the Active Directory / LDAP server. An administrator assigns a workgroup and a role to each authenticated user within the Content Manager Users screen.

Configuring an Active Directory / LDAP / Connection

To configure a connection to the Active Directory or LDAP server using either LDAP, or LDAPS (which is LDAP encrypted over SSL) go to the Content Manager Server Settings screen. Here an administrator can:

- Specify the LDAP Host URL and credentials with which to connect
- Specify the “Base Distinguished Name” (DN), which is the place within the directory services structure under which the users of interest live.

Connection Types

- Content Manager supports an authenticated connection to the directory server, by specifying the Connection DN and Connection password.
- An anonymous connection to the directory server is supported by leaving these fields blank.
Testing

- The **Test Connection** button verifies that all the connection information works and that the directory server is reachable.

- The **Test Lookup** button lets the administrator enter a sample username and password, and verify that this user can be found and authenticated using the directory server.

Multiple Domain Trees / Multiple Forests

- The configuration user interface lets the administrator specify the Base DN under which all the users are to be found.

Importing Users

To import users from the Active Directory or LDAP server, go to the Content Manager **Users** screen. Here you can click on the **Import from LDAP** button.

An **LDAP query** string can be specified to filter the list of users to import. When a user is imported, a user-record is created in Content Manager, and fields such as user name, first and last names, and email address are automatically populated based on the data in the Active Directory / LDAP server.

After importing the users into Content Manager the user’s workgroup, roles, and other details can be set.

**Authentication**

When a user logs in to Content Manager, their credentials (username and password) are sent to the Active Directory / LDAP server for verification. Login will only be permitted if the account is valid, and the account has not been disabled, and the password is correct.
**Improved Editing/Previewing of Messages**

While editing a Message, the Message Preview is now updated automatically, as you enter or edit message text, or message media. The screenshot below was captured while the User was typing “John Smith please dial extension 23” – The thumbnail lags momentarily behind.

- **Display of Trimmed Duration**
  
  When adjusting the **Trim start time** and **Trim end time** of a video or audio file, the resulting **Trimmed duration** is now shown:
Miscellaneous Features

In addition to the new features of Release 6 specifically highlighted.

Designer

- Updated to version 9.0 of the MainConcept MPEG-2 and H.264 decoders, for improved performance and compatibility.
- The main tab of the Design panel now offers six alignment buttons:
  - Horizontal alignment: left-margin aligned, center-aligned, or right-margin aligned. (Changing the horizontal alignment also changes the multi-line text alignment to match.)
  - Vertical alignment: top-margin aligned, middle-aligned, or bottom-margin aligned.
- OpenType fonts with PostScript outlines may now be used in Designer and Player. These fonts must be pre-installed on the Player for use, because they are not embeddable. (OpenType fonts with TrueType outlines have always worked, and are embedded if their font-licensing properties allow it.)
- Color chips on the Palette panel or in any of the effect-options popup panels now have tooltips giving the pen-number and RGB value
- Designer now offers Save All Scripts and Close All Scripts features in the File pull-down menu.
- Designer now offers a Publish All Scripts feature in the File pull-down menu. This makes it easy to publish many scripts at once to the same Content Manager.
- You can control whether the shadow should Show Through any part of the face or outline that is partially transparent due to effects.
- When using the Multi-tile Editor with a starting image that includes transparency information, the image is drawn over a checkerboard background. Also, the visibility of the slice-lines has been improved.

Player

- Updated to version 9.0 of the MainConcept MPEG-2 and H.264 decoders, for improved performance and compatibility.
- Windows Scripts and Custom applications running alongside Player can now report custom warnings or problems into the log, which can also appear on the Content Manager Player Health screens, and trigger an email-alert to the network administrators. This is done using the LogExternalError method.
- Greatly simplified selecting the Player Identification in the Player Configuration Tool. By default, the pop-up list now shows only available players (i.e. those players not previously assigned). The new Show Players selector lets you toggle between available players and all players. The new Player Name Filter text-field lets you filter the pop-up list to only show those players whose name matches the text you type.
- When using the Intel G45 or Q45 graphics chipsets, or newer chipsets like Sandy Bridge, playback will default to 32-bit color instead of 16-bit color.
- Player now supports the new maintenance job scheduling capability to control when and whether the job should be retried if it could not be performed at the original time and date.
- When Player begins to download files, it pre-allocates the total space needed on disk, in order to reduce disk-fragmentation.

**Content Manager**
- Content Manager now ships with PostgreSQL 9.0.4-1, Tomcat 5.5.33, and Java runtime 1.6 Update 26.
- In the Media list and the Messages list, you can now filter by Valid Date. For instance, this lets you see which items are expired (i.e. their Properties > Valid Date's End by date is in the past.
- When scheduling maintenance jobs to run once at a given time, there is a new option controlling when and whether the job should be retried if it could not be performed at the original time and date. You can select Retry of Never (like before), but now you can also select Retry of Same time next day, and specify until what day the retries should be performed.
- The Content Manager File Uploader has been converted into a Java applet (rather than a Java WebStart application). This provides a better user-experience, and compatibility with Chrome and other browsers.
- The Playback Audit Reports now reflect the Screen count values under Player Properties. That is, the number of playouts will be multiplied by the number of screens connected to a given Player.

**Ad Manager**
- The Contracted Open Space reports now show the custom subcontracted value (prorated over the periods presented in the reports).
Idea Bridge Server 2.58

- The new XDS-104 SignBoard has four touch-buttons on the frame that can be used to trigger content on the frame. To use this functionality:
  - In Content Manager, define channel metadata and event triggers for buttons you wish to use (A, B, C, and/or D):
    - Channel.IAdea.ButtonPress.A
    - Channel.IAdea.ButtonPress.B
    - Channel.IAdea.ButtonPress.C
    - Channel.IAdea.ButtonPress.D
  - When the user presses one of those buttons, the corresponding trigger-playlist will play.
  - To build a tree-structured menu, define a trigger corresponding to a sequence of button presses. For example, Channel.IAdea.ButtonPress.A.C will trigger when the user presses button A and then button C.
  - When button triggers are defined for a channel, the button indicator LEDs will flash, to draw users to the device. The default flash pattern is two seconds on, followed by a half-second off. This can be modified by defining Player.IAdea.TouchButton.LightOnDuration and Player.IAdea.TouchButton.LightOffDuration Player metadata values (they can be integers or strings, and should be set to the desired value in seconds.)

- Support for the new XMP-340 media appliance, which has an NTSC/PAL audio/video input, allowing you to overlay external video with scheduled signage content.

A complete list of all fixes and improvements are contained in the product release notes, at https://license.scala.com/readme/ReleaseNotes.html.
Content Manager – Online Resources

Don’t forget to visit our website “Scala Extras” at http://www.scala.com/extras.

A link to this webpage and related information is located on the home screen of the Content Manager:

The “Extras Home Page” is an online resource of Content, Templates, Clipart and Tools that can be downloaded to enhance your Scala Content Manager. Nearly 3GB of Content, Templates and Clipart are also available on the product DVD to save you the time of downloading these items separately.

By clicking on “User’s Guides” you will able to download and view the latest end user documentation from Scala on all of our products.

The “Scala Support/FAQ” link brings you to our support portal, which provides answers many frequently asked questions for each of our products.

If you are logged in as the system Administrator, a fourth link is provided to “Check for Software Updates”. This takes you to http://www.scala.com/updates with your Content Manager serial number included.
**Script Toolkits**

Script Toolkits consists of script “building blocks” that can be used by a sufficiently trained technical resource to build sophisticated applications without needing to start from scratch. These Script Toolkits are provided “as-is” and will require further customization to meet your needs. If you need help configuring one of these Script Toolkits, please contact your authorized Scala Certified Partner for a quote.

A short description of each is as follows:

**RSS Script Toolkit** – A series of templates that allow you to add a RSS feed to a Crawl, Sidebar or Main area of your screen. Load these scripts into Designer, make whatever cosmetic changes you desire (fonts, color schemes, etc.), and publish this to your Content Manager. Then login to your Content Manager and create a new Message. Select the RSS Template, enter your URL, select a variety of options and save.

**Scala Browser Script Toolkit** – Two scripts are included with this Script Toolkit. The first is a full screen web browser run from the Launch Module with command line parameters for URL, timeout and if the navigation bar is hidden or not. The second captures a snapshot of a URL for display in a playlist as a PNG file.

**Triggers Script Toolkit** – This sophisticated collection of scripts allows you to connect Scala to a variety of trigger sources such as file triggers, network triggers, RSS triggers or even synchronize players together.

**Meeting Room Script Toolkits** – Scala has developed support for Dean Evans’ EMS, Newmarket’s Delphi product and Polyvision’s RoomWizard product. With these toolkits, Scala is able to automatically retrieve meeting room schedules and display them.

**CSV Schedule Script Toolkit** – Using this Script Toolkit with a “Comma Separated Value” (CSV) file from Excel or other program, you can import a meeting or event schedule into Scala and display it with a pleasing graphical design. The fields supported here are name of event, name of group, start time, start date, stop time, stop date, and location name.

**Volume Control Script Toolkit** - A Python script that lets you control the PC master volume control independently of any sound or music from content that is playing.

**PDF Print Script Toolkit** – This includes an executable program that is run from the Launch Module that allows you to print PDFs from your application. This works best with older versions of Acrobat Reader such as 5.X and 6.X.

**National Weather Service Script Toolkit** – The US Government maintains a website of regional weather stats in the United States. Access to this information is free of charge, but not as detailed as you might get from a paid service with forecast information. This contains a series of templates for displaying the current weather conditions by zip code either as a crawl, sidebar or main area.
DataCall Script Toolkit – customizable newsfeed support program for news, weather, sports, stocks, horoscopes, and more. [http://www.datacalltech.com/products/](http://www.datacalltech.com/products/) A subscription fee is charged for this service.

Useful Templates – Many of the above Script Toolkits use a similar style for displaying information in the crawl, sidebar or main area. This collection of templates is designed with the same look and feel, and can be added to a Content Manager playlist. Five different templates are included – A basic message template, a video and picture template, a time & date template, a TV Tuner template (TV Tuner hardware and TV Tuner EX Module are sold separately), and a Windows Media Streaming Video template.

With more sophisticated Script Toolkits, technical assistance is generally required. Please contact your Scala Certified Partner for a quote. He will be more than happy to provide you with a sophisticated turnkey solution customized to you for any of these Script Toolkits.

Scala may, from time to time, modify, add or remove Script Toolkits from the Extras Home page.

In addition to those provided by Scala, many of our Scala Certified Partners have also developed add-on products. One that is noteworthy is:

AccuWeather – The world’s leading weather authority has developed a customized weather feed, designed by Telecine Multimedia and exclusively for Scala. This also includes newsfeeds from the Associated Press. For more information, visit [http://www.accuweather.com/scala](http://www.accuweather.com/scala). A subscription fee is charged for this service.

We would like to thank you for choosing Scala as your digital signage platform of choice and hope that you enjoy the many new features and benefits of Release 6. For further information on Scala’s products and services, please visit us on the web at [http://www.scala.com](http://www.scala.com).