

History of Changes

Table of contents

1 Introduction and explanation of symbols.....	3
2 Version 0.9-dev (not yet released).....	3
2.1 Changes to Build.....	3
2.2 Changes to the Code Base.....	3
2.3 Changes to Documentation.....	4
2.4 Contributors to this release.....	5
3 Version 0.8 (2007-04-18).....	5
3.1 Changes to Build.....	5
3.2 Changes to the Code Base.....	5
3.3 Changes to Documentation.....	12
3.4 Contributors to this release.....	14
4 Version 0.7.1-dev (not released).....	14
4.1 Changes to the Code Base.....	14
4.2 Changes to Documentation.....	15
4.3 Contributors to this release.....	15
5 Version 0.7 (2005-06-23).....	15
5.1 Changes to Project Administration.....	15
5.2 Changes to Build.....	15
5.3 Changes to the Code Base.....	15
5.4 Changes to Documentation.....	18
5.5 Contributors to this release.....	19
6 Version 0.6 (2004-10-15).....	20
6.1 Changes to Project Administration.....	20
6.2 Changes to Build.....	20
6.3 Changes to the Code Base.....	20
6.4 Changes to Documentation.....	27
6.5 Contributors to this release.....	28
7 Version 0.5.1 (2003-10-06).....	28
7.1 Changes to Build.....	28
7.2 Changes to the Code Base.....	28

7.3 Contributors to this release.....	29
8 Version 0.5 (2003-09-13).....	29
8.1 Changes to the Code Base.....	29
8.2 Changes to Documentation.....	32
8.3 Contributors to this release.....	33
9 Version 0.4 (2003-02-12).....	33
9.1 Changes to the Code Base.....	33
9.2 Changes to Documentation.....	34
9.3 Contributors to this release.....	34
10 Version 0.3 (2003-01-30).....	34
10.1 Changes to Build.....	34
10.2 Changes to the Code Base.....	34
10.3 Changes to Documentation.....	36
10.4 Contributors to this release.....	36
11 Version 0.2 (2002-11-16).....	37
11.1 Changes to the Code Base.....	37
11.2 Contributors to this release.....	37
12 Version 0.2rc1 (2002-11-13).....	37
12.1 Changes to Project Administration.....	37
12.2 Changes to Build.....	37
12.3 Changes to the Code Base.....	38
12.4 Changes to Design.....	40
12.5 Changes to Documentation.....	40
12.6 Contributors to this release.....	40
13 All Committers.....	41



1 Introduction and explanation of symbols

Changes are sorted by "type" and then chronologically with the most recent at the top. These symbols denote the various action types: =add, =fix, =remove, =update

2 Version 0.9-dev (not yet released)













See each [plugin](#) for its detailed changes.

2.1 Changes to Build




- Explicitly set the javac target@ to our defined base version. This fixed an issue with plugins being deployed by committers using more recent versions. Committed by DC. Thanks to Ron Blaschke.






2.2 Changes to the Code Base

- Added the ability for a "trademark statement" at bottom of all pages. For configuration details, see skinconf.xml from a new "seed" site. Committed by DC. See Issue [FOR-1170](#).
- Enable configuration of some Cocoon sitemap components, e.g. output html encoding and document type declaration for html and xhtml serializers, JTidy properties file location for html generator. See [FAQ](#) Committed by DC. See Issue [FOR-1071](#).
- Added initial whiteboard input plugin "skos". Handles input documents as Simple Knowledge Organisation Systems ([SKOS](#)), a set of specifications to support the representation of thesauri, classification schemes, taxonomies, etc. Committed by RDG. Thanks to Sina K. Heshmati. See Issue [FOR-1004](#).
- Added initial whiteboard input plugin "foaf". Handles input documents in Friend of a Friend (FOAF) format. Committed by GM. Thanks to Oshani Senevira. See Issue [FOR-1002](#).
- Added initial whiteboard input and output plugins "tei". These handle TEI-Lite Text Encoding Initiative (TEI). Committed by RDG.
- Enable PHP by default. See the [FAQ](#). Thanks to Cyriaque Dupoirieux for the suggestion. Committed by DC.
- The "class" attributes in the document-v13 and document-v20 DTDs now enable multiple space-separated class definitions. Committed by DC. Thanks to Brolin Empey.
- There was a problem with plugins libs not being copied. Using the war task from ant fixes this issue. Committed by TS. See Issue [FOR-1074](#).
- There was a partially implemented xml catalog with missing project symbols file. Only affected users of the 'seed-basic' template site. See notes in [upgrading to v0.9](#) Committed by DC. See Issue [FOR-1075](#).
- Forrestbot deploy.scp workstage now reports which files were transferred. Committed by DC.

-  Updated to Jing-20081028 release (from <http://code.google.com/p/jing-trang/>). As well as providing us with a reliable RELAX NG tool, this upgrade fixes an issue on some Java 6 with missing datatype library. Committed by DC. See Issue [FOR-984](#).
-  Updated to Apache-Ant-1.7.1 release. Also jsch-0.1.28 to jsch-0.1.39 release. Committed by DC.
-  Our packaged version of Apache Cocoon has been upgraded to use the latest version of their stable 2.1 branch. This is a major step forward for Forrest. It enables us to use a reliable and up-to-date Cocoon. Forrest developers can again participate at Cocoon to fix issues or develop new blocks. A number of major performance issues are already fixed in this version. Also upgraded various other important supporting products such as Apache Xerces and Apache Xalan, etc. See [upgrading notes](#). Committed by TS, DC. See Issue [FOR-955](#), [FOR-1017](#).
-  Promoting the output.inputModule plugin to core. Main reason for the move is to prevent plugins dependencies since the code has attracted different use cases solved in plugins to move it into core. Committed by TS. See Issue [FOR-1103](#).
-  Added ability to use XInclude to the document-v20 xdoc DTD. See an example in a 'forrest seed sample' site. Committed by DC. See Issue [FOR-1032](#).
-  Images had not been reliably reproduced in PDFs (fop version prior to 0.94). The old way always expected a physical URI (file or http) the new fop URIResolver in the FOP-NG block delegates to Cocoon's SourceResolver framework, meaning images can be the result of a pipeline. Committed by TS. See Issue [FOR-635](#).
-  Moved fo- and pdf-generation completely into pdf-plugin as part of the upgrade to fop 0.94. See plugin docs for addition details. Committed by FSO.
-  The "wholesite" html/pdf ability was broken with the locationmap. Committed by TS. See Issue [FOR-733](#).
-  Re-configured Forrest Zone to use SMF. Committed by GM. See Issue [FOR-940](#).
-  Fix unkown font error in FO generation. Committed by RDG. Thanks to Uwe Kreibaum. See Issue [FOR-640](#).
-  Added method to make URLs absolute in PDF via skinconf.xml. Committed by BMD. Thanks to Patrick Ohly. See Issue [FOR-1013](#).
-  Added method to disable table of contents in PDF via skinconf.xml. Committed by BMD. Thanks to Patrick Ohly. See Issue [FOR-355](#).

2.3 Changes to Documentation

-  Added document to facilitate [upgrading to v0.9](#) Committed by DC.
-  Added new documents: [How to deploy documentation with the Forrestbot "svn" workstage](#) which explains how the Apache Forrest project manages their project documentation, and [How to deploy documentation with the Forrestbot "scp" workstage](#) which explains how to manage a personal or company website using Secure Shell SCP to deploy the generated documents. Committed by DC.
-  Added example of using XInclude to the 'forrest seed sample' site. Committed by DC. Thanks to Carlos Tejo. See Issue [FOR-814](#).

-  Fixed docs in several places to work with fop94 upgrade. Committed by FSO.
-  Added demonstration of more xdoc elements to the sample document-v20 Committed by DC. Thanks to Carlos Tejo. See Issue [FOR-1062](#).
-  Enhance the "[HowTo Generate an ASF mirrors page](#)" doc to better explain. Refer to Forrest site-author as an example. This doc explains many things which are useful beyond the "ASF mirrors" example. It shows how to add a specialised HTML form to a forrest-based site, howto to include and exclude non-linked extra documents to the processing using the Cocoon CLI. Committed by DC.
-  Refer to ForrestBar from [How to do development with Apache Forrest](#) as a way to easily view the internal processing steps. Committed by DC.
-  Add explanation of [ForrestBar](#) menu items. Committed by CD.

2.4 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:


Brian M. Dube (BMD), Cyriaque Dupoirieux (CD), David Crossley (DC), Ferdinand Soethe (FSO), Gavin McDonald (GM), Ross Gardler (RDG), Thorsten Scherler (TS), (TS, DC).

This is a list of other contributors:








Brolin Empey, Carlos Tejo, Oshani Senevira, Patrick Ohly, Ron Blaschke, Sina K. Heshmati, Uwe Kreibaum.


















3 Version 0.8 (2007-04-18)



3.1 Changes to Build












-  Add new build target "clean-build". Committed by CD.















3.2 Changes to the Code Base





















-  Add initial DOAP plugin to Whiteboard. Committed by RDG.
-  Add initial Solr plugin to Whiteboard. Committed by TS.
-  Added initial whiteboard input plugin "citations". Thanks to Gavin for turning the contribution into a plugin. Use input docs that are lists of citations. Committed by DC. Thanks to Ross Gardler. See Issue [FOR-756](#).
-  Added initial whiteboard input plugin "glossary". Thanks to Gavin for turning the contribution into a plugin. Enable glossary input: a list of technical terms and definitions. Committed by DC. Thanks to Ross Gardler. See Issue [FOR-755](#).
-  Added initial whiteboard input plugin "odt". Use OpenDocument ODT as input. Committed by TS.
-  Add support to the tigris skin for header/meta tags in xdoc input documents. Committed by TS. Thanks to Brian Dube. See Issue [FOR-842](#).
-  Add demo page to seed site for "Using Scalable Vector Graphics (SVG)". Committed by DC.


















-  Added initial whiteboard input plugin "serverStatus". Uses the StatusGenerator to show Cocoon's operating environment and shows the contents of the cache stores. Committed by DC.
-  Added initial whiteboard internal plugin "DevTools". Intended for various development-related tasks, e.g. publish a page to the local build directory from within 'forrest run'. Committed by RDG.
-  Added initial whiteboard output plugin "Anakia". Output as the Anakia "xdoc" format. Committed by DC.
-  Added initial whiteboard output plugin "php" to integrate php calls. Committed by CD.
-  New skinconf parameter "disable-copyright-footer" (default=false) to not show the copyright notice in html page footer. Committed by DC.
-  Added ForrestConfModule as the beginning of a new configuration system. Committed by RDG. See Issue [FOR-588](#).
-  A "half way" solution to using plugins in place. Note that if you modify your plugin code you will still need to do "ant local-deploy" to see the changes. This patch only ensures that the plugin is installed on the first run. Committed by RDG. See Issue [FOR-388](#).
-  Add new site seeding targets and a new business seed target. This allows for interactive creation of seed sites - existing 'forrest seed' behaviour is unchanged which is equivalent to 'forrest seed-sample'. New ones are 'forrest seed-business' and 'forrest seed-basic'. Committed by RDG.
-  Added new "clean" targets. Doing 'forrest clean-site' will remove the contents of the project's generated documents directory. Doing 'forrest clean-work' will remove the project's work directories (usually build/tmp and build/webapp which include the Cocoon cache and the Cocoon logs). Doing 'forrest clean' will remove both sections. Committed by DC.
-  Added initial whiteboard internal plugin "NoteTaking". Adds a form to a page that can be used to enter notes relating to the page. Committed by RDG.
-  Clarify some confusing notes about site/@href in seeds xdocs/site.xml files. Committed by DC.
-  Finish renaming of files for a-to-b.xml naming convention. Committed by DG. See Issue [FOR-697](#).
-  Add a Devs menu to tools/forrestbar to help with testing intermediate Cocoon pipelines. Committed by CD.
-  Describe the [status messages](#) that are issued by Cocoon CLI during processing of each doc. Committed by DC.
-  The broken-links file is now copied into to the site root as "broken-links.xml" so that when building with Forrestbot you can easily view it. Committed by RDG.
-  Reviewed all sitemaps to use locationmap references (lm:). At the same time we changed filenames of core stylesheets to follow a filename convention (e.g. html2document.xml => html-to-document.xml) which enables automated locationmap matches. Thanks to the many people who were involved with addressing this issue. See the commit logs associated with FOR-200. Committed by RDG. Thanks to Community. See Issue [FOR-200](#).
-  Prototype of new xml-based properties system. Projects and plugins can use a forrest.properties.xml file. At this stage, it supplements the existing forrest.properties file. See the projectInfo plugin for an example of its use. Committed by RDG. See Issue [FOR-588](#).








-  Add notes about naming convention for locationmap references. Gathered from a ForrestFriday IRC session (thanks to Tim Williams for writing them up). See [locationmap docs](#). Committed by RDG. Thanks to Community. See Issue [FOR-200](#).
-  Added initial whiteboard input plugin "XDoc". Forrest xdoc input to internal XHTML2. Committed by TWW.
-  Added initial whiteboard internal plugin "xhtml2". Started work on xhtml in the core. Committed by RDG.
-  Add Cocoon Validation Block. Uses transformers to enable RELAX NG validation and W3C XML Schema validation using Jing and Xerces. See [documentation](#). Committed by DC. Thanks to Pier Fumagalli.
-  Added initial whiteboard input plugin "ecs". Use the responses from Amazon web services (ECS) as input. Committed by RDG.
-  Added initial whiteboard input plugin for Lenya integration. Committed by RDG. Thanks to Joachim Breitsprecher. See Issue [FOR-660](#).
-  Added initial whiteboard input plugin for "Blog". Use an XPathDirectory generator to publish indices of articles. Committed by TWW.
-  Added the beginnings of a sitemap analysis tool to the whiteboard. Doesn't do much at the moment. Committed by TWW.
-  Added initial whiteboard input plugin for "Resume". Use input docs in xmlresume format. Committed by RDG.
-  Added initial whiteboard internal plugin for "GoogleSitemap". Access a list of pages in "Google Sitemap" format. Committed by RDG. Thanks to Rasik Pandey. See Issue [FOR-597](#).
-  Add WTP 0.7 compatability for Eclipse plugin. Clarify installation notes. Committed by RDG. Thanks to Alan Chandler.
-  Use locationmap's mounting capability to allow selective project location overrides. Committed by TWW.
-  Add locationmap selector based mounting (and project-based mounting). Committed by TWW.
-  Add locationmap mounting capability. Committed by TWW.
-  Added support for actions in the locationmap. Committed by TS.
-  Plugins can now define their own *.xconf file to add configuration information to cocoon.xconf. Simply place your *.xconf file in PLUGIN_HOME/conf/*.xconf. Note that changes to this configuration file will not take effect until Forrest has been restarted. Committed by RDG.
-  Added initial whiteboard output plugin for "voice". Read a document using a voice enabled browser such as Opera. Committed by RDG. Thanks to Tom HANAX. See Issue [FOR-589](#).
-  Strip remaining <i18n:text> elements that remain if i18n processing has been disabled. This was causing invalid HTML output. Committed by DC. See Issue [FOR-592](#).
-  Added a shell script to do some steps of the cocoon update process. Still there are some steps that should rather be done by a script, rather than committer interaction. Updated the readme to state that some steps could be done by the script. [Diff](#) Committed by TS.

-  Refactored the view resolver code of the internal.view plugin. Created an action that is doing the same as before the combination of sitemap+xml.
 Added 2 java classes to package org.apache.forrest.plugin.internal.view.acting:
 - 1.FallbackResolverAction.java
 - 2.FallbackResolverHelper.java
 Committed by TS.
-  Removed project.view-defaultView properties and added project.theme-extension instead. The combination of project.theme-extension and project.theme is equal to project.view-defaultView.
 Committed by TS.
-  Added new elements to org.apache.forrest.conf.ForrestConfModule name="defaults":
 view-themes
 theme-ext
 theme
 Committed by TS.
-  Removed "defaultView" and added new element to org.apache.forrest.conf.ForrestConfModule name="project":
 theme-ext
 Committed by TS.
-  normalize-space() the forrest:properties before parsing them to the pipe
 Committed by TS.
-  Use sets of symbols as xml entities for character replacement. There is a core set and each project can define a set. For example, use "&myproj;" to represent the project name together with trademark symbol "My Project Name™". See [FAQ](#). Committed by DC.
-  Plugins can now define their own *.xconf file to add configuration information to cocoon.xconf. Simply place your *.xconf file in PLUGIN_HOME/conf/*.xconf. Note that changes to this configuration file will not take effect until Forrest has been restarted. Committed by RDG.
-  New site seeding mechanism. You can now run "forrest seed" as before, or you can run "forrest seed-business". The later will ask a number of questions about the site being seeded (business name, description etc.) and will create a very simple site designed for business. To quickly see the results, i.e. avoid answering the questions, do "forrest seedTestBusiness". More seed sites will be added in the future. Committed by RDG.
-  Added support for Locationmaps. This enables content to be retrieved from a location that is defined in a locationmap file. A project-based file can be located at PROJECT_HOME/src/documentation/content/locationmap.xml while core locationmaps are at \$FORREST_HOME/main/webapp/locationmap-*.xml files.
 The advantage of this is that the URL seen by the user need bear no relation to the location of the source document, thus Forrest can separate the client URL space from the source document URL space. Thus, using the locationmap it is possible to pull together documents from many different locations into a single uniform site.
 In addition, since the user URL space is now unconnected to the source URL space it is possible to move source documents without breaking any existing user links.
 See [locationmap docs](#) for more information. Thanks to Unico Hommes for the original locationmap implementation which was added to Forrest long ago. Committed by RDG.
-  Handling of document/header/version elements is now re-enabled. Committed by DC. See Issue [FOR-973](#).
-  Thanks to Gunther Sablon for reporting this issue. Plugins were not being deployed to a Webapp WAR file correctly. Committed by RDG. See Issue [FOR-735](#).















-  Hard coded URLs of versions causing maintenance issues in the generated Plugins Index. Use a parameter instead to construct the URL per version. Committed by DC. See Issue [FOR-963](#).
-  Fixes problem if contexts were not utilized in status.xml, an incorrect changes document would be generated. Committed by RDG. Thanks to Vadim Gritsenko. See Issue [FOR-958](#).
-  With comments & thanks also to Paul Kronenwetter, fixes a bug where duplicate apply-templates was causing duplicate content with span classes. Committed by SNM. Thanks to Vronk Duat. See Issue [FOR-704](#).
-  Fix caching problem that made a restart necessary after making a locationmap resource location change. Committed by TWW. See Issue [FOR-732](#).
-  After doing 'forrest clean' then Forrest could not be run without network access, due to not being able to retrieve plugin descriptor files. Committed by DC. See Issue [FOR-927](#).
-  When using html as source, the "a" elements were not rendered properly if both @href and @name attributes. A side-effect of this fix is that now all other attributes such as @title or @target are copied over. Also removed the automated generation of @id attributes from @name attributes, which can lead to invalid IDs and other confusion. Committed by DC. Thanks to Jim Dixon. See Issue [FOR-448](#).
-  Remove xconf support for plugins. Cocoon has moved away from this XConfToolTask xpatch technique. [Diff](#) Committed by RDG.
-  Enhanced the Message of the Day (MOTD) facility to enable specific matches. See skinconf.xml from a "seed" site for configuration details. The @starts-with=true anchors the URI string to the start, otherwise contains. To use it, declare skinconfig-v08-1.dtd in your skinconf.xml file. Committed by DC.
-  Improved the autogenerated site linkmap.html page. Do not show empty links for group labels. Use a better title and introduction. Use @description if available. Committed by DC.
-  Rename webapp build target to run-webapp to distinguish the resulting webapp from one suitable for deployment (use the war target for that) and provide a new xconf that is used in the war to ensure plugins can be found in war files Committed by RDG. See Issue [FOR-735](#).
-  [FOR-924](#) Readding the loading from (default-)forrest.properties which got removed in r430588 when closing [FOR-916](#). Thanks Martin Stockhammer for pointing it out, providing us with a patch and for your contribution. Committed by TS. Thanks to Martin Stockhammer. See Issue [FOR-924](#).
-  **FOR-920** Merging the defaults and project modules to the new properties module. You can use it like {properties:forrest.home}, please refer to the [update documentation](#) how to change your {defaults:*} {project:*} and {forrest:*}. Committed by TS.
-  [FOR-800](#) - make forrest.properties.xml (as aggregation of all properties) available via cocoon://. The last remaining issue was implementing the Iterator getAttributeNames in the ForrestConfModule. To see all available properties add org.apache.forrest.plugin.output.inputModule and request cocoon://module.properties.properties. Committed by TS. See Issue [FOR-800](#).
-  [FOR-916](#) - adding site-wide configuration files Applying patches from Mathieu Champlon. Thanks Mathieu for your contribution. Committed by TS. Thanks to Mathieu Champlon. See Issue [FOR-916](#).

-  Updated the cocoon.xconf and declared the core components that are needed for flow. This makes it possible to use flow in forrest. Committed by TS. Thanks to David Crossley.
-  Enabled i18n by default in fresh-site: as the default i18n config now requires an explicit locale specification (using an URL parameter for example), this shouldn't affect people who do not use i18n. Committed by BD.
-  Completed the de and fr translations of the fresh-site, added fr and de versions of the index page as examples of language switching. Committed by BD.
-  Moved LocaleAction and LocaleMatcher configurations to main sitemap, and changed I18nTransformer use to take locale info from enclosing LocaleAction everywhere. Committed by BD. See Issue [FOR-887](#).
-  Updated to Apache-Ant-1.6.5 release, jsch-0.1.28, apache-jakarta-commons-net-1.4.1 Committed by DC.
-  Use locationmap to resolve i18n catalogues. Committed by RDG. Thanks to Brian Dube. See Issue [FOR-690](#).
-  Updated xerces to 2.8.0, xml-apis to 1.3.03, log4j to 1.2.13 and ehcache to 1.2. Committed by AG.
-  Howto-v20 now properly handles a/@class=fork etc. attribute to enable links to open in a new browser window. Committed by DC. Thanks to Steve Masover. See Issue [FOR-824](#).
-  Fixed inconsistent line-endings in comments of generated html. Committed by DC. See Issue [FOR-492](#).
-  Able to [declare](#) additional sources for plugins. Assists with development of private and local project-specific plugins. Committed by CD.
-  Forrestbot deploy.scp workstage now uses keyfile/passphrase in preference, then fallback to remote password. Committed by DC. See Issue [FOR-818](#).
-  Retrieve i18n catalogue from whatever skins directory is in use. Committed by RDG. Thanks to Torsten Stolpmann. See Issue [FOR-806](#).
-  Add explanation of processing to the pathutils stylesheet. Committed by FSO.
-  Enable optional printing of image alt text in PDFs. Committed by RDG.
-  Update the Forrest plugin for the XMLmind XML Editor at [tools/xxe](#) Committed by RDG. Thanks to Sjur N. Moshagen. See Issue [FOR-779](#), [FOR-780](#), [FOR-722](#).
-  Upgrade our packaged Cocoon to cocoon-2.2.0-dev-r351990 and enhanced the notes about how to upgrade. Committed by DC.
-  New skinconf parameter "disable-copyright-footer" (default=false) to not show the copyright notice in html page footer. Committed by DC.
-  Ensure that content exists before forrest starts. Committed by RDG.
-  Add a new xslt template "add.class" to properly append extra class attributes to note|warning|fixme|code elements to enable extra CSS classification. [Diff](#) Committed by JS.
-  Review and synchronise our Cocoon configuration. Committed by DC.












-  Reduce some log messages duplication. Tidy up the log configuration file. Add a commented example of adding contextual info to other logs. Committed by DC.
-  Improve symlink resolution and fix incorrect argument passing in the bin/forrest shell script. Committed by RDG. Thanks to Richard Calmbach. See Issue [FOR-771](#).
-  Enable use of common character entities in skinconf.xml, e.g. accented characters and trademark symbols. Committed by DC. Thanks to Paul Devine.
-  Changed handling of table elements with class-attributes in source: Table elements w/o class elements will receive standard Forrest styling like before (cellpadding="4" cellspacing="1" class="ForrestTable") while elements that have class will pass unchanged. Note: To style tables with class elements like before you have to add styling code in the extra-css-section of skinconfig. Committed by FSO.
-  Fixed problems with disappearing of id-attributes in img-element and several others. Committed by FSO.
-  Added LocationmapSourceFactory.java. With this it is possible to request locationmap source via lm://my-location which makes it easier to use it without contacting a input module in java and any other files. [Diff](#) Committed by TS.
-  Added variable.helper.xsl to the core, should be enhanced by matching the default.forrest.properties.xml. This xsl will produce all variables we use in skins to the new property system. Moved pathutils.xsl to the core from the skins. [Diff](#) Committed by TS.
-  Added helper stylesheets to locationmap and core stylesheets. generateId.xsl (will generate a unique id) and replaceCharsInString.xsl (will find and replace character in a string) [Diff](#) Committed by TS.
-  Fixed and enhanced the Forrest plugin for the XMLmind XML Editor at [tools/xxe](#) Committed by DC. Thanks to Sjur N. Moshagen. See Issue [FOR-581](#), [FOR-720](#).
-  Updated tools/forrestbar to be compatible with recent versions of Firefox. Committed by DC. Thanks to Addison Berry. See Issue [FOR-180](#), [FOR-716](#).
-  Correctly handle w3c-xml-schema rules in [SourceTypeAction](#). Committed by RDG. Thanks to Josias Thoeny. See Issue [FOR-710](#).
-  Upgrade our packaged Cocoon to cocoon-2.2.0-dev-r279987 and enhanced the notes about how to upgrade. Committed by JJP.
-  Removed the project.theme-dir property by adding it to the lm like suggest by Ross. [Diff](#) Committed by TS. Thanks to Ross Gardler.
-  Changed the 'local forrest' caption to host:port format. Added localhost as option. added structurizer xml view to devs. [Diff](#) Committed by TS.
-  Allowed as well localhost as local address for jetty for the forrestbar. [Diff](#) Committed by TS.
-  The xml comments from source files were not being generated to the output. Committed by DG. See Issue [FOR-555](#).
-  Add Cocoon Profiler block. Use this during development to list the various sitemap pipelines and components that are being used, how much time was used by each, whether each component uses the Cocoon cache, and show the actual xml data. See [documentation](#). Thanks to Ron Blaschke for the suggestion. Committed by DC. See Issue [FOR-572](#).

-  The hlink and vlink colors were not set correctly by SkinconfTransformer. Committed by DC. Thanks to Dave Brosius. See Issue [FOR-649](#).
-  Synchronise the appearance of warning, fixme, and note elements in the pelt skin. Committed by DC. Thanks to Gavin McDonald. See Issue [FOR-604](#).
-  Enhanced notes about using plugins. Committed by RDG. Thanks to Phillip Evens.
-  Strip remaining `<i18n:text>` elements that remain if i18n processing has been disabled. This was causing invalid HTML output. Thanks to assistance from Gavin McDonald. Committed by DC. See Issue [FOR-592](#).
-  Enhanced the initial Eclipse plugin for using Forrest via Eclipse. This work was enabled via a "Google Summer of Code" project. See [docs](#). Committed by RDG. Thanks to Anil Ramnanan.
-  Added new seed targets seed-basic and seed-sample. That closes FOR-253. [Diff](#) Committed by TS. See Issue [FOR-253](#).
-  Fixed sample sites from the seedTestBusiness FOR-670: forrest seedTestBusiness; forrest site fails resume dtd validation [Diff](#) Committed by TS. Thanks to kevin. See Issue [FOR-670](#).

3.3 Changes to Documentation

-  Added document to facilitate [upgrading to v0.8](#) Committed by DC.
-  New section to explain [Locationmap processing](#) and the magic of the naming convention. Committed by DC.
-  New document to explain [Cocoon sitemaps](#) using a specific worked example. Committed by DC.
-  Added [notes](#) to explain the main documentation, as well as documentation and examples in each plugins and documentation and examples in the 'forrest seed-sample' site. Committed by DC.
-  Added notes about [configuring](#) a system-wide XML Catalog Entity Resolver to share local DTDs between multiple projects. Committed by DC.
-  Added notes about [debugging](#) the XML Catalog Entity Resolver for local DTDs. Committed by DC.
-  Added doc to explain [Skins and Dispatcher status](#). Committed by DC.
-  Move documentation from text file into howto [Release](#) doc and enhance it. Committed by FSO.
-  Re-arrange documentation menus, added best practice and procedures sections. Committed by FSO.
-  Add document about project [tasks](#). Committed by DC.
-  Add initial [glossary](#) to explain some Forrest terminology. Committed by DC. Thanks to Gavin McDonald.
-  Add FAQ about using older versions of specific plugins. Committed by DC.
-  Link from whiteboard/forrestdoc/README.txt to some past mail discussion to encourage its development. Forrestdoc is a Javadoc-like/Sourcecode/Documentation management system. Committed by DC.
-  New page for [thanks](#). Committed by DC.

-  Add FAQ about [job postings](#). Committed by DC.
-  Add FAQ about [Enabling Cocoon Checksum](#). Committed by DC. Thanks to Paul Kronenwetter. See Issue [FOR-778](#).
-  Add explanation of [Using Cocoon sitemap execution logger](#). Committed by DC.
-  Add FAQ #crawler to explain how the Cocoon crawler gathers links. Committed by DC.
-  Add notes about how to use the [Issue Tracker](#). Committed by DC.
-  Added basic instructions to deploy and install the forrestbar from the source as readme.txtDiff Committed by TS.
-  We now have a regular 24-hour IRC session once per month. Developers get together. See [ForrestFriday](#). Committed by DC.
-  Documenting some of the locationmap syntax and naming conventions as comments/examples until it can be done more formally. See 'forrest seed-sample' and [locationmap docs](#). Committed by TWW.
-  Add an "events" section to our SVN to hold materials for gatherings of developers that have been held outside the mailing list community. Committed by DC.
-  Add a new document [How to do development with Apache Forrest](#). Provides some tips and procedures for all aspects of using Forrest. Committed by DC.
-  Added document to explain the process for [Becoming an Apache Forrest committer](#). Committed by DC. Thanks to Addison Berry. See Issue [FOR-603](#).
-  Update docs to reflect locationmap naming conventions. Committed by TS. See Issue [FOR-861](#).
-  Add a HowTo sample document to the fresh-site samples. Committed by RDG. Thanks to Randy Metcalfe. See Issue [FOR-959](#).
-  **FOR-920** - Addings notes how to [update](#) the different module calls in custom code. Committed by TS.
-  Added FAQ to explain the Cocoon Cache and some ways to enhance responsiveness. Inspired by comments from Torsten Stolpmann. Committed by DC.
-  Enhance the explanation of integrating [DocBook](#) sources to also explain how to use Content Aware Pipelines (SourceTypeAction). Committed by DC. Thanks to Brian Dube.
-  Enhance the FAQ about efficiently generating [single documents](#). Use 'wget' or Ant to retrieve individual files. Committed by DC. Thanks to Jan Materne.
-  Review and enhance the [Release](#) doc. Committed by DC.
-  Add note about using entity catalogs for DTDs etc. for [plugins](#). Committed by DC.
-  Improved the explanation of [using plugins](#): how they are declared, what version of a plugin is used, what locations are searched for plugins sources. Committed by CD.
-  Enhance the FAQ about efficiently generating [single documents](#). Committed by DC. Thanks to Clay Leeds. See Issue [FOR-840](#).
-  Added lenya.zone site to the dispatcher section in the live sites. Committed by TS.

-  Update the notes on [patch](#) submission. Techniques suggested by Richard Calmbach and Ross Gardler. Committed by DC.
-  Improved forrestbot docs. Committed by DC. Thanks to Richard Calmbach. See Issue [FOR-568](#).
-  Enhance the FAQ #single-document about "project.start-uri" to control which files to process. Committed by DC.
-  Explain how developers can add sites to [Example sites](#). Committed by DC.
-  Various documentation updates. Committed by DC. Thanks to Richard Calmbach. See Issue [FOR-751](#).
-  Enhance etc/RELEASE_NOTES.txt Committed by DC.
-  Add section about using new/experimental features (e.g. Locationmap, Dispatcher) together with plugins. See [Howto Build Plugins](#) doc. Committed by RDG.
-  Add section about managing the plugins descriptors to [Howto Build Plugins](#) doc. Committed by DC.
-  Clarify the FAQ about using [raw HTML](#) docs with no decoration. Committed by RDG. See Issue [FOR-666](#).
-  Clarify documentation for Forrestbot. Committed by DC. Thanks to Addison Berry. See Issue [FOR-568](#).
-  Added information about how to debug forrest java classes to the faq [Diff](#) Committed by TS.

3.4 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:

Antonio Gallardo (AG), Bertrand Delacretaz (BD), Cyriaque Dupoirieux (CD), David Crossley (DC), Diwaker Gupta (DG), Ferdinand Soethe (FSO), Juan Jose Pablos (JJP), Johannes Schaefer (JS), Ross Gardler (RDG), Sjur N Moshagen (SNM), Thorsten Scherler (TS), Tim Williams (TWW).


This is a list of other contributors:





Addison Berry, Alan Chandler, Anil Ramnanan, Brian Dube, Clay Leeds, Community, Dave Brosius, David Crossley, Gavin McDonald, Jan Materne, Jim Dixon, Joachim Breitsprecher, Josias Thoeny, kevin, Martin Stockhammer, Mathieu Champlon, Paul Devine, Paul Kronenwetter, Phillip Evens, Pier Fumagalli, Randy Metcalfe, Rasik Pandey, Richard Calmbach, Ross Gardler, Sjur N. Moshagen, Steve Masover, Tom HANAX, Torsten Stolpmann, Vadim Gritsenko, Vronk Duat.

4 Version 0.7.1-dev (not released)

See each [plugin](#) for its detailed changes.

4.1 Changes to the Code Base

-  Howto-v20 now properly handles a/@class=fork etc. attribute to enable links to open in a new browser window. Committed by DC. Thanks to Steve Masover. See Issue [FOR-824](#).

-  Forrestbot deploy.scp workstage now uses keyfile/passphrase in preference, then fallback to remote password. Committed by DC. See Issue [FOR-818](#).
-  Changed handling of table elements with class-attributes in source: Table elements w/o class elements will receive standard Forrest styling like before (cellpadding="4" cellspacing="1" class="ForrestTable") while elements that have class will pass unchanged. Note: To style tables with class elements like before you have to add styling code in the extra-css-section of skinconfig. Committed by FSO.
-  Fixed problems with disappearing of id-attributes in img-element and several others. Committed by FSO.
-  Added new "clean" targets. Doing 'forrest clean-site' will remove the contents of the project's generated documents directory. Doing 'forrest clean-work' will remove the project's work directories (usually build/tmp and build/webapp which include the Cocoon cache and the Cocoon logs). Doing 'forrest clean' will remove both sections. Committed by DC.

4.2 Changes to Documentation

-  Added document to facilitate [upgrading to v0.7](#) Committed by DC.

4.3 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:

David Crossley (DC), Ferdinand Soethe (FSO).

This is a list of other contributors:

Steve Masover.


5 Version 0.7 (2005-06-23)

See each [plugin](#) for its detailed changes.



5.1 Changes to Project Administration





















-  Added testing facilities to plugins to facilitate integration testing. Committed by RDG.





















5.2 Changes to Build















-  Changed Ant build property name "version" to "forrest.version" to prevent collisions with other build systems when using the Ant "import" task. Committed by DC.

5.3 Changes to the Code Base



-  Added initial whiteboard input plugin "Daisy". Input is content retrieved from a "Daisy CMS repository". Committed by RDG.
-  Added initial whiteboard output plugin "OpenOffice.org". Output OOo writer files. Committed by RDG.
















-  Added initial whiteboard output plugin "Chart". Draw charts using jCharts. Committed by RDG.
-  Added initial whiteboard input plugin "Database". Uses much of the Cocoon DB block code and is part of a larger experiment to get Cocoon blocks working as Forrest plugins. Committed by RDG.
-  Plugins are now version controlled. Committed by RDG. See Issue [FOR-528](#).
-  Added importance attribute to actions on status.dtd Committed by JJP. See Issue [FOR-487](#).
-  Added org.apache.forrest.plugin.input.listLocations plugin. Use lists of locations maintained in a simple xml format and transform them to documents. Committed by DC.
-  Added org.apache.forrest.plugin.input.dtdx plugin by moving functionality out of the core. Generates DTD documentation using a custom Cocoon Generator. Committed by DC. See Issue [FOR-389](#).
-  Changed plugin template location to {forrest.plugins.dir}/pluginTemplate in the build.xml of plugins/ and whiteboard/plugins/. That allows to create new plugins in the whiteboard/plugin/ directory. Committed by TS.
-  Added viewHelper plugin and removed experimental leather plugin. Enhanced the documentation of view/viewHelper. Committed by TS.
-  Created a new plugin org.apache.forrest.plugin.internal.view from the fbits core and removed the fbits plugin. Committed by TS.
-  Added proxy.host, proxy.port, proxy.user and proxy.password to allow plugin downloads from behind a proxy. Committed by RDG. Thanks to Cyriaque Dupoirieux. See Issue [FOR-445](#).
-  Added a plugin to handle input documents from Microsoft Excel. Committed by RDG. Thanks to Johannes Schaefer. See Issue [FOR-373](#).
-  Enabled XInclude in site.xml and tabs.xml Committed by RDG. Thanks to Sjur N. Moshagen. See Issue [FOR-417](#).
-  Added external plugin POD-input to allow Plain Old Documentation (POD) files to be included in a Forrest site. Committed by RDG. Thanks to Ron Blaschke.
-  Moved POD output from the common skin to its own plugin. Committed by RFT.
-  Added a text-output plugin. Committed by RFT. See Issue [FOR-125](#).
-  Added WYSIWYG editor as a plugin (only works in dynamic webapps). Committed by RDG.
-  Added photoGallery plugin. Committed by RDG. Thanks to Jörg Werner. See Issue [FOR-387](#).
-  Added capability to deploy directly to site in SVN using "ant deploy" from within plugin directory. Committed by RDG.
-  Added to the document-v20 DTD to support "usemap" attribute in img tag. Also added demonstration of client-side imagemap to the "seed site". Committed by DC. Thanks to Tamara Harpster. See Issue [FOR-322](#).
-  Enable sitemap plugins. Plugins allow Forrest to have functionality added through the addition of small code blocks (plugins). Plugins are downloaded automatically when a site that requires them is built. See [Extending Forrest with Plugins](#). Committed by RDG.

-  Added initial whiteboard output plugin "htmlArea". Output pages that enable editing of the input. Only html at this stage. Committed by RDG.
-  Added initial whiteboard output plugin "rtf". Output documents as RTF. Committed by RDG.
-  Added initial whiteboard input plugin "logs". Use various logfiles as input. Currently only Java Logging API. Committed by RDG.
-  The brokenlinks file now contains referer information. Upgraded lib/core/cocoon.jar and added attribute "show-referrers" to the Cocoon cli.xconf Committed by DC. Thanks to Upayavira. See Issue [FOR-204](#).
-  Add initial PDF plugin Committed by RDG.
-  Add initial Wiki plugin Committed by RDG.
-  Add initial Feeder plugin Committed by RDG.
-  The "extra-css" from skinconf.xml is now inserted at the very end of the CSS. That enables it to properly override other elements. Committed by DC.
-  Fixed a bug with individual "credit image" placement in the pelt skin. If one credit was specified to be in the alternative location, then all credits were placed there. Also added a second alternative location. Committed by DC.
-  Generate html/head/meta elements from document-v2. Committed by DC. Thanks to Mark Eggers. See Issue [FOR-482](#), [FOR-457](#).
-  Images group.svg and project.svg were rendered with the shadow effect slightly clipped. Needed to add width and height to filter element. Committed by TS. Thanks to Kevin. See Issue [FOR-477](#).
-  Fix broken links in Table of Contents when titles contain accented characters. Committed by RDG. Thanks to Cyriaque Dupoirieux. See Issue [FOR-345](#).
-  I18n uses org.apache.cocoon.matching.LocaleMatcher instead of i18n transformer. This requires that your source must now be foo.lang.xml instead of foo_lang.xml Committed by JJP. See Issue [FOR-18](#).
-  Fix various bugs with Lucene search. Committed by DC. Thanks to Florian G. Haas. See Issue [FOR-246](#), [FOR-431](#).
-  Fixed quotes in forrest.bat so forrest can be in a directory with spaces. Committed by DB. Thanks to Gary Feldman. See Issue [FOR-330](#).
-  LocaleAction changed its API. The "lang" value is "language" now. Committed by JJP. See Issue [FOR-18](#).
-  Ignore directory links for aggregations. Committed by JJP. See Issue [FOR-370](#).
-  Fixed some public identifiers (for DTD-v2.0) which were still pointing to old versions of DTDs. Committed by DC.
-  Stopped doing deletion of the cache-dir, so consecutive "forrest site" actions can be cached. Committed by JJP.
-  Merge xdocs and raw files in the same directory src/document/content/xdocs Committed by JJP.

-  Config check for the i8n attribute for i18n transformer so it is used only when necessary. Committed by JJP. See Issue [FOR-18](#).
-  Enhanced the Message of the Day (MOTD) facility. See skinconf.xml from a "seed" site for configuration details. Append a small text string after html title. Add text to a panel on the page. Select different messages depending on the URI string pattern. To use it, declare skinconfig-v07-1.dtd in your skinconf.xml file. Committed by DC.
-  Enable skinconf to specify optional page number format for PDF. Committed by DC. Thanks to Cyriaque Dupoirieux. See Issue [FOR-355](#).
-  Split plugins.xml between plugins.xml in main plugins dir and whiteboard-plugins.xml in whiteboard/plugins and added relevant docs to plugins index page. Committed by RDG.
-  Added ability to add page breaks to output. See [Page Breaks FAQ](#) Committed by RDG.
-  * Uses skinconf.xml to determine background and border color for notes, warnings, and fixmes; * Uses skinconf.xml to determine background and border color for table cells (headers and data); * Honors headings type set in skinconf.xml (clean|underlined|boxed) and colors headings accordingly; * Uses skinconf.xml to determine font color for links. In addition, this patch extends the "link" template to also apply to the "fork", "jump", and "a" elements. Committed by RDG. Thanks to Florian G. Haas. See Issue [FOR-430](#).
-  Reinstate error reporting for broken "site:" and "ext:" links which are due to missing entries in site.xml or typos in site: links. The text "error:" is also prepended. This is a workaround for bug [FOR-284](#) "link rewriting broken when linking to xml source views which contain site: links". This latter issue is handled by the core. However, if your project uses a Cocoon [cli.xconf](#) then you will need add the same "exclude" entries. Committed by DC. See Issue [FOR-284](#).
-  Handle FAQs sections and faqs with both howto-v1.* and howto-v2.* docs. Apply proper section numbering. Committed by DC. Thanks to Mark Eggers. See Issue [FOR-479](#).
-  Added FAQ about "pageBreakBefore" and "pageBreakAfter" class int PDF documents and describe how to enable the page break behaviour in HTML documents. Committed by RDG.
-  Use "pageBreakBefore" and "pageBreakAfter" class to sections to force a page break in PDF output. Committed by RDG.
-  Moved status "changes" and "todo" page generation to the org.apache.forrest.plugin.input.projectInfo plugin. Committed by RDG.
-  Updated nekodtd to 0.1.11 Committed by AG.
-  Update fop-0.20.5 just with optional jimi support. This fixes the issue building the Apache FOP site. Replace libraries to use the cocoon-2.2.0-dev version. Committed by JJP.
-  [Java 1.4 is required](#) starting with Forrest-0.7-dev Committed by DC.

5.4 Changes to Documentation

-  Added document to facilitate [upgrading to v0.7](#) Committed by DC.
-  Removed the leather-dev docs and added the beginning of the View plugin docs. Committed by TS.

-  Added [How to customize processing of html source](#) Committed by DC. Thanks to Ferdinand Soethe. See Issue [FOR-446](#).
-  Added [How-To Run Forrest from Maven](#). Committed by RDG. Thanks to Ian P. Springer. See Issue [FOR-369](#).
-  Added [How-To Build a plugin](#). Committed by RDG.
-  Split plugin documentation between [user](#) and [developer](#) topics. Committed by RDG.
-  Added HowTo about [editing CSS](#) in a WYSIWYG fashion using Mozilla Firefox and its Edit-CSS plugin. Committed by RDG. Thanks to Ferdinand Soethe.
-  Added custom xml sample and project sitemap to the 'forrest seed site'. Committed by JJP.
-  Added [How to modify the color of generated corner images](#). Committed by DC. Thanks to Stephan E. Schlierf. See Issue [FOR-351](#).
-  Added links to example websites to demonstrate each available [default skin](#). Committed by DC.
-  Rewrote example of raw content in fresh-site to correctly document the behaviour in 0.7. Committed by RDG. See Issue [FOR-470](#).
-  Removed ihtml example from fresh-site and replaced with an example of embedded HTML. The use of ihtml is now deprecated in favour of embedded HTML. Committed by RDG.
-  Allow the serving of raw SVG files to allow clients to render locally. Committed by RDG. See Issue [FOR-185](#).
-  Plugin docs are now upated automatically when a plugin is deployed. Alternatively you can update the docs independantly by running the deploy-docs target in the plugin directory. Committed by RDG.
-  Removed old versions of pre-release plugins following renaming to the convention defined in [Plugin Infrastructure](#). Committed by DC.
-  Added FAQ to explain character encoding for certain languages. Committed by JJP. Thanks to Joao Ferreira. See Issue [FOR-305](#).
-  Updated How-To: [How to create a PDF document for each tab](#) to create subject-specific aggregated documents. Committed by TS.

5.5 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:


Antonio Gallardo (AG), Dave Brondsema (DB), David Crossley (DC), Juan Jose Pablos (JJP), Ross Gardler (RDG), Rick Tessner (RFT), Thorsten Scherler (TS).

This is a list of other contributors:






Cyriaque Dupoirieux, Ferdinand Soethe, Florian G. Haas, Gary Feldman, Ian P. Springer, Joao Ferreira, Johannes Schaefer, Jörg Werner, Kevin, Mark Eggers, Ron Blaschke, Sjur N. Moshagen, Stephan E. Schlierf, Tamara Harpster, Upayavira.

6 Version 0.6 (2004-10-15)









6.1 Changes to Project Administration






















-  Moved forrestbot2 from scratchpad into main. Uses ant 1.6's 'import' task instead of XSLT/ant. Webapp completely rewritten to use JSTL, Struts, Java utility classes, and OpenSymphony's OSUser for flexible authentication. Committed by DB.



















6.2 Changes to Build



















-  New 'clean-dist' target for build.xml, which is now the default target. Committed by DB. See Issue [FOR-108](#).
-  The 'validate-site' build target will validate the intermediate xdocs. Committed by JJP.
-  Support running Forrest on Win9x. Committed by DB. Thanks to Pierrick Brihaye. See Issue [FOR-113](#).
-  Don't copy unneeded project files in 'war' and 'webapp' targets. Committed by DB. See Issue [FOR-207](#).
-  Add more descriptions to forrest targets. Highlight the most common ones. Committed by DB. See Issue [FOR-216](#).

6.3 Changes to the Code Base























-  Added initial whiteboard internal plugin "IMSManifest". Alternative navigation method. Generates menu links from IMS Manifests (Learning Objects). Committed by RDG.
-  getMenu.js - fixes a path issue and the double click behaviour of pelt. Committed by TS.
-  Explained the usage of the extra-css element in skinconf.xml of the fresh site. Committed by TS.
-  Initial Chaperon grammar for minimal MoinMoin Wiki to Forrest xdocs transformation. Source documents use the *.moinwiki filename extension. Committed by DC. Thanks to Fabio Rinaldi. See Issue [FOR-268](#).
-  Requesting linkmap.html Forrest now renders the site.xml file as a table of contents. Committed by NKB.
-  Now the *.ihtml and *.cwiki extensions are deprecated. To get the same functionality it is recommended to switch to *.html and *.jspwiki. With this it's now possible to have a site in simple html, edited with any html editor. The *.jspwiki extension was put to make it clear what the format is about. Committed by NKB.
-  New project sitemap extension mechanism. Now it is possible to add a project sitemap that plugs into the processing at the beginning. If the requested url is resolved by it, it will serve the file directly. If the requested url with the extension changed to xml is matched, then Forrest will use that result as the intermediate format and render it. This will enable project-specific sitemaps to not collide with future Forrest updates. Committed by NKB.
-  Added configuration for XMLMind XML Editor to scratchpad. Originally from splike.com Committed by DB.






















-  Automatically add some meta elements to head of html (Generator name, Forrest version, skin name) Committed by DC.
-  Optional feedback link for the footer of all skins. Committed by DC.
-  New output format for POD (the Perl community's Plain Old Documentation) triggered using the .pod filename extension. Initial work, needs enhancement. See [forrest-dev discussion](#) Committed by DC. Thanks to Rick Tessner.
-  Eclipse plugin code added to scratchpad (donated by [Burrokeet](#)). Initial work, needs enhancement. Committed by RDG.
-  Added forrestbot deploy.svn implementation. Committed by DB. See Issue [FOR-219](#).
-  The new "pelt" skin (uses CSS and div). See notes about [Default skins](#). Committed by TS. See Issue [FOR-182](#).
-  In skinconfig, add box-location attribute to search element. Committed by DB. See Issue [FOR-142](#).
-  Locationmap modules added. Not in use yet. Committed by NKB. Thanks to Unico Hommes.
-  Forrestdoc code added to scratchpad; previously was [Jakarta Alexandria](#) Committed by NKB.
-  Add <copyright-link> element to skinconf Committed by DB. See Issue [FOR-120](#).
-  New stylesheet to import the original cocoon.xconf file Committed by JJP.
-  Move context targets from forrest.build.xml to targets/context Use skinconf DTD. Use xmlvalidate for skinconf. Create upgradskinconf.xsl for old skinconf.xml files Committed by JJP.
-  The language alternative div displays language in your own language. Committed by JJP.
-  Docbook support for refentry element and it's children. Generally used for man pages. Committed by DB.
-  Do not create ToC unless it has been defined on the skinconf. Change level attribute to max-depth attribute. Add a min-sections attribute to define a minimum number of sections before create a toc. Committed by JJP.
-  Add Language alternatives div. To test it: i18n-foo.html Committed by JJP.
-  Page size and orientation for pdf. Committed by JJP. Thanks to Florian G. Haas. See Issue [FOR-112](#).
-  Added SkinconfTransformer, that augments the skinconf.xml by adding these attributes to colors if not present: @highlight, @lowlight, @font, @link, @vlink, @hlink. Committed by NKB.
-  Now skins can get a stab at enhancing skinconf.xml, by placing a skinconf.xsl file in the skin directory. By default some values are added by the common skin, like default Forrest colors. Committed by NKB.
-  Add support for Openoffice Writer 1.1 files. Committed by RP.
-  Fixes to the krysalis skin to bring it up to snuff. Added lateral search bar. Added credits section. Use automatically skinnable borders Fix code font size. Other small enhancements. Committed by NKB.
-  New "extra-css" tag in skinconf can contain css that is injected in forrest.css, added in the skins by default. Committed by NKB.


















-  New section in skinconf about colors used by the site. Enabled for krysalis-site and tigris-style. If a needed color is not specified, the default one is used. Committed by NKB.
-  Now skin resources can be generated from skinconf.xml from xslt. For example '/myskin/css/my.css.xslt' is used by forrest on 'skinconf.xml' to get 'my.css' Committed by NKB.
-  It is now possible to have two levels of tabs. Committed by NKB. Thanks to [Ross Gardler](#). See Issue [FOR-98](#).
-  External links are now identified by a small trailing icon. The icon can be overridden by the skin and the behaviour can be disabled in skinconf.xml. Committed by NKB.
-  Added new 'tigris' skin, by using exactly the same skin version 1.1. from the project Style at <http://style.tigris.org/>. This will completely replace the avalon-tigris skin in subsequent versions. The avalon-tigris skin is to be considered deprecated and no longer developed. Committed by NKB.
-  Properties from `${user.home}/forrest.properties` are loaded, after the project's `forrest.properties` and before the default-`forrest.properties` are. Committed by DB.
-  New file format: '.aart'. These are text files that are converted automatically by Cocoon in SVG, if requested with a '.png' extension. Committed by NKB.
-  Now images are generated from the xdocs content dir as if they were in the resources/images dir. The latter will be phased out. Committed by NKB.
-  Added a new property to `forrest.properties` (`project.raw-content-dir=${project.content-dir}/content`) to define where raw files are to be served from. Also removed the internal property `real-content.dir` that was used internally for this and replaced it with a `raw-content.dir` property. Committed by NKB.
-  Patch facility to be used by any contributor (From Ant's project). To use it run "`build.[sh|bat] patch`". Committed by JJP. Thanks to [Jan Materne](#).
-  Skins can now be packaged, downloaded and automatically installed. See [documentation](#). Committed by NKB.
-  First I18n integration for menus in forrest. Committed by JJP. See Issue [FOR-9](#).
-  Integrate Lucene on Forrest. Check the bug report for more info. Committed by JJP. Thanks to [Ramón Prades](#). See Issue [FOR-9](#).
-  Added XSP support. For old sitemap.xmap add this tag: `<map:generator name="serverpages" src="org.apache.cocoon.generation.ServerPagesGenerator"/>` Committed by JJP. See Issue [FOR-56](#).
-  Proper positioning of icon/links for PDF, XML, POD, Print content options on pelt skin. Committed by DC. Thanks to Arturo Vazquez.
-  Allow forrest to run in a project directory with a space in the name. Committed by DB. See Issue [FOR-267](#).
-  Fixed the domain bug of the searchbox in pelt. Committed by TS.
-  Fixed the menu in pelt by adding `getMenu.js` and changing the `site2xhtml.xsl`. Now the chapter image will get expand again. Committed by TS.











-  Relative URIs with absolute paths were broken in the site.xml linking mechanism. Committed by DC. See Issue [FOR-268](#).
-  Re-write the Chaperon grammar for JSPWiki to address ambiguity with paragraphs and sub-sections. Committed by DC. Thanks to Fabio Rinaldi.
-  JCS log messages go through cocoon instead of to stdout. Committed by DB. See Issue [FOR-214](#).
-  Generate proper html for figures in simplified docbook. Committed by DB. Thanks to Johannes Schaefer. See Issue [FOR-226](#).
-  PDF pages receive skinconf properly (through the skinconf pipeline). Committed by DB. See Issue [FOR-138](#).
-  FAQ page does not need to provide it's own extra index. Committed by DB. See Issue [FOR-154](#).
-  Brokenlinks file is now generated in project.home rather than forrest.home Committed by JJP. See Issue [FOR-165](#).
-  Add missing xdocs from the validate.exclude property. Allowing to exclude files. Committed by JJP. See Issue [FOR-130](#).
-  Improved resolving image references in PDFs. Committed by DB. See Issue [FOR-114](#).
-  Now CSS files are parsed internally, so that the urls are included in the static site generation. Committed by NKB.
-  Lucene-index target works. If search@provider="lucene" is set create a search index. Build site and run targets as per project directory instead of forrest.home. Committed by JJP.
-  Moved all references to //skinconfig out of the document2html.xsl into the site2xhtml.xsl file. * Rationalized the Table of Contents stuff by creating a "toc" mode in the common/xslt/html/document2html.xsl. That is then used to generate the per-page ToC and the ToC attached to the menu. * Removed extraneous default xsl matchers on the non-common document2html and site2xhtml XSLs. This allows matches defined in the imported transformation sheets to match (imported sheets have lower precedence). * Defined a couple of <div id="..."> place holder tags used by the document2html. Those are then skinned by the site2xhtml sheets. * Note: If you have your own skins that were referencing "\$config" or "//skinconfig" in the document2html.xsl then you need to make similar changes. * For more information see the FOR-146 issue report. Committed by DC. Thanks to Rick Tessner. See Issue [FOR-146](#).
-  Remove misleading error message. Reported a cocoon bug #28939 Committed by JJP.
-  skinconf was being ignored for the svg and fo formats. Committed by JJP. See Issue [FOR-139](#).
-  "Warning" was mistakenly labeled as "Note" in PDF. Committed by JJP. Thanks to Nick Chalko. See Issue [FOR-136](#).
-  site2book.xsl handle all menu-item and menu attributes Committed by JJP. See Issue [FOR-69](#).
-  Proper table around 'graphic' in simplified docbook. Committed by DB. Thanks to Rob Exley. See Issue [FOR-115](#).
-  Replace document() function to get skinconf values and use "//skinconfig". Fix order so it can validate skinconf. Use <search/> instead of <disable-search/> <disable-lucene/

> <searchsite-domain/> <searchsite-name/>. Fix skinconf.xml so it produces a proper skinconf Committed by JJP.





-  Updated jetty to 4.2.19 Committed by AG.
-  Update scripts and config files to allow upgrade to cocoon 2.1.5-dev Committed by JJP.
-  Stop overwriting skinconf and cocoon.xconf on webapp target. Libs were not copied on the webapp target. Committed by JJP.
-  ToC element is optional on skinconf. Committed by JJP.
-  Allow a full url image to be included on a pdf file. Use only tmp as the temporary directory. Committed by JJP.
-  Split build file in various parts (webapp,war,validate,site) Committed by JJP.
-  Move ant + Jetty under tools on the build target Committed by JJP.
-  Wrong directory being used for wiki grammars. Committed by JJP.
-  Now skins that are edited in place have their non-traversable resources also copied for static rendering. Committed by NKB. Thanks to [Ross Gardler](#). See Issue [FOR-87](#), [FOR-88](#).
-  DHTML menus in Krysalis skin now work on all levels. Committed by NKB. Thanks to [Ross Gardler](#). See Issue [FOR-86](#).
-  Wrong default value for translations directory. Committed by JJP.
-  Fixed the handling of images and resources in the resources.xmap pipeline, to cater for the new system that does not copy docs prior to rendering. Committed by NKB.
-  Fixed bug in the autownload support for skins that was preventing custom skins in the project source dir from working. Committed by NKB. Thanks to [Sebastian Bergmann](#).
-  Added default translation for menu on fresh-site so it is used when the user locale can not be found. Synchronized some I18n labels after a modification on fresh-site. Committed by JJP.
-  Patched directory2book.xml to be able to serve raw documents from the side menu (e.g. pdf); previously it always generated .html links. Committed by NKB. Thanks to [Eric BURGHARD](#).
-  Skins "forrest-css" and "avalon-tigris" are deleted. The "tigris-style" is renamed to "tigris". Aliases set in place for backward-compatibility. The old "forrest-site" and "krysalis-site" skins are retained for a little while longer, but are deprecated, so please move to one of the other skins. See notes about [Default skins](#). Committed by DB. See Issue [FOR-181](#).
-  Remove 'template' skin; better to base a new skin on an existing one. Committed by DB.
-  Clean up first Lucene search implementation in Forrest. Committed by JJP.
-  The .html files have been deprecated. Use .ihtml instead. Future html input support will be based on [this discussion](#). Committed by DB. See Issue [FOR-131](#).
-  Revert the changes to access skinconf using "skinconf/" done on r10259 Committed by JJP.
-  Forrest-targets with ant proxy is obsolete; use forrestbot now. Committed by DB. See Issue [FOR-140](#).
-  Updated commons-collections to 3.1, commons-logging to 1.0.4, jcs to 1.1-dev.20040811, lucene to 1.4.1 Committed by AG.






-  Enable email address obfuscation to be configurable using the obfuscate-mail-value option in skinconf.xml Committed by DC. See Issue [FOR-122](#).
-  Enhance the document2pod functionality to handle many other elements and enable the link to this format to be configured via skinconf. See the issue report for some notes. Committed by DC. Thanks to Rick Tessner. See Issue [FOR-240](#).
-  Updated Ant 1.6.2. Committed by AG.
-  Have @class attribute in DTD for every element, which enables the "extra-css" section in the skinconf to be put to good use. Updated all v1.2 DTDs to become v1.3 DTDs (forward compatibility: v1.2 docs will work fine as V1.3). Updated the v2.0a DTDs to become v2.0 DTDs (forward incompatibility: v1.2/1.3 docs are not forward-compatible as V2.0). Added demo of extra-css to the seed site and updated some sample docs to use new v1.3 DTDs. See the [samples and reference docs](#). See the issue report for full list of changes. Committed by DC. Thanks to Rick Tessner. See Issue [FOR-174](#).
-  Projects can use a local CatalogManager.properties to declare additional Catalogs for DTDs and other entities. Committed by DC.
-  Improve look of PDF pages. Committed by DB.
-  Fix relative links and image references in aggregate pages. Committed by DB. See Issue [FOR-148](#).
-  Worked search functionality into all skins. Fixed query parameters for Google site search. Lateral search box was incompatible with new skinconf.xml format. Committed by JJP. Thanks to Florian G. Haas. See Issue [FOR-9](#).
-  Upgrade to cocoon 2.1.5 Committed by JJP.
-  Removed author and cvs-id tags from code and xdocs. Committed by DB. See Issue [FOR-123](#).
-  Repack Jetty without JSP support. Now we can remove org.apache.jasper.jar Committed by JJP.
-  Forrest does not copy anything around anymore. The only step to make it work is to have java compile the forrest jar; all other resources are used in their original location. Committed by NKB.
-  Jetty jar was mistakenly compiled for jdk 1.4 - now re-compiled for jdk 1.3 Committed by JJP.
-  'build patch' command updated for SVN. Committed by DB. See Issue [FOR-137](#).
-  Completely rewritten Lucene-based index and search functionality. Committed by JJP. Thanks to Florian G. Haas. See Issue [FOR-9](#).
-  Converted repository from CVS to SVN. Committed by DB. Thanks to Apache Infrastructure.
-  Upgrade to batik 1.5.1 Committed by JJP.
-  Add i18n to single file content. Committed by JJP.
-  Updated Ant 1.6.1 Committed by AG.
-  Add i18n to tabs. Committed by JJP.
-  Putting a jettyconf.xml file in your document directory will override the one supplied in the default Forrest context. Also no longer copies jettyconf.xml to build dir (one more file closer to no copying ;-)) Committed by RDG.

-  Support multiple skin descriptor files via the `forrest.skins.descriptors` property Committed by DB.
-  Libraries are not copied anymore in the servlet context of the dist and of the project being built; they are added instead to the classpath of jetty for the 'run' target and of the Cocoon CLI for the default 'site' target. Committed by NKB.
-  Upgrade to Jing 20030619. Committed by JJP.
-  Validation is now "dynamic", by setting the parser feature "`http://apache.org/xml/features/validation/dynamic`". This means that documents with DTD are fully validated, while documents without DTD are just checked for well-formedness. Committed by NKB.
-  Removed `xml2xhtml.xsl` import in `profile2page.xsl` that was not used (file not present). Committed by RDG. Thanks to [Juan Jose Pablos](#). See Issue [FOR-59](#).
-  New build target to build a webapp that can be distributed. "war" target depends on "code" which will produce an deployable webapp, "run" target depends on "webapp-local" which leaves many files in the project directory to ease editing (e.g. src, resources and skins) Committed by RDG. See Issue [FOR-98](#).
-  Upgrade to cocoon 2.1.3 nekohtml 0.1.9 remove `excalibur-concurrent-20020820.jar` remove `excalibur-cli-1.0.jar` remove `excalibur-datasource-vm12-20021121.jar` remove `jakarta-oro-2.0.6.jar` Committed by JJP.
-  Instead of `forrest-targets.ent` with Ant 1.6 Forrest can now also be used with the new import facility: `<import file="forrest-targets.xml"/>` Committed by NKB.
-  Automatic generation of borders from skin colors and naming convention. Rounded and straight 45 degrees corners supplied. For example, to generate a 'rounded corner for 'top 'left the size of '5' pixels of background 'header', foreground 'tab-selected' and border of 'tab-unselected' I can just ask for: `/skin/images/rc-t-l-5-1header-2tab-selected-3-tab-unselected.png` Committed by NKB.
-  Removed all validation includes and excludes from the fresh site, except the most basic one. This means that the feature is to be considered deprecated. Committed by NKB.
-  Updated Ant 1.6.0 Committed by AG.
-  Refactored `forrestbot` to organize workstages and their implementations. Properties named by workstage and implementation for clarity and to prevent conflicts. Committed by DB.
-  The 'clean-site' target appears in 'forrest -projecthelp'. Deletes temp, webapp, and brokenlinks files too. Committed by DB.
-  Updated and separated in their directory all the resources needed by Chaperon, and make the pipeline generate the xml grammar versions if unavailable. This fixes some wiki rendering bugs and makes sections follow the correct level nesting. Committed by NKB.
-  Now also all forrest /resources are editable in `forrest.home` and translations in their source space. Committed by NKB.
-  Skins are now editable directly in `FORREST_HOME`. Committed by NKB. Thanks to [Ross Gardler](#). See Issue [FOR-85](#).
-  Updated Entity Resolver from pre-release to official `xml-commons-resolver-1.1` release. Committed by DC.

-  Updated Jetty to 4.2.14 Committed by JJP.
-  Removed the deprecated Ant @tag@ substitution method for skins to reduce copying further. Committed by NKB.
-  All resources in skins/common/images/scripts are used if the corresponding resource is not found in the skin being used. Moved under these dirs the images and the scripts that were placed by default under resources/images or copied in each skin, and added a temporary sitemap rule to route the request of the images to the new location. Committed by NKB.
-  Moved the images of fresh-site to the src/content/xdocs directory, for the new layout that has been decided on forrest-dev. Committed by NKB.
-  Major update to inner working of the krysalis-site skin: - removed all use of the spacer.gif image - replaced all visual enhancement icons with css icons - fixed CSS and html validation - reduced final output size, - removed all font tag usage in favor of css - added aural (speech) style in css - reduced usage of nested tables - refactored main xhtml stylesheet to be more clear and maintainable - refactored css to have a single small place where to define the skin colors - changed icons to original icons (made by me and not gotten from elsewhere) - removed unused icons. - made location of minitoc configurable as "page", "menu", or "both" Committed by NKB.
-  Removed duplicated copying of files during the creation of the distro. Now the command-line context dir is like the webapp context dir. This reduces Forrest build time from 53 to 19 seconds on my system. Committed by NKB.
-  Added support for docbook version 4.1.2. Allows importing files from various editors (Open office, Abiword). Committed by JJP.
-  Added German Translation for menu in fresh-site example seed. Committed by JJP. Thanks to [Jan Materne](#).
-  Added creation of TOC support on PDF files. Improved so it uses value from skinconfig.xml. Improve algorithm to define font size for section/subsection/... Committed by JJP. Thanks to [Eric Burghard](#).
-  In the generated "changes" document, add "version_" to section@id as required by document-v12. Sort action types order to "add","remove","update","fix". Committed by JJP.

6.4 Changes to Documentation

-  Added a How-To: [Generate an ASF mirrors page using interactive web form](#) using ihtml to include additional html form elements. Committed by DC.
-  Added a How-To: [How to create a PDF document for each tab](#) to create subject-specific aggregated documents. Committed by TS. Thanks to Stephan E. Schlierf. See Issue [FOR-218](#).
-  Created the [How-To](#) section of the documentation. Continue Dianna Shannon's good work with designing the DTDs, concepts, and documentation effort at Cocoon. Committed by DC.
-  Added a mechanism to enable impoverished XML tools that do not use the Catalog Entity Resolver to fetch the DTDs direct from the website. See notes for "Upgrading to v0.6". Please help to upgrade our /dtd/.htaccess file (see issue [FOR-107](#)) and please help to address the SVN Issue [1233](#). Committed by DC. See Issue [FOR-107](#).

-  Added new documentation about [Searching Forrest-built documentation](#) which describes both Lucene and Google search. Committed by JJP. Thanks to Florian G. Haas. See Issue [FOR-9](#).
-  Information about the new [forrest-user](#) mail list. Committed by JJP.
-  Began documentation for new forrestbot; moved stable forrestbot docs Committed by DB.
-  Replace URLs in all docs to be <http://forrest.apache.org/> Committed by JJP.
-  Forrest is now a top-level Apache project. The new website is at <http://forrest.apache.org/> Committed by DC.

6.5 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:

Antonio Gallardo (AG), Dave Brondsema (DB), David Crossley (DC), Juan Jose Pablos (JJP), Nicola Ken Barozzi (NKB), Ross Gardler (RDG), Reinhard Pötz (RP), Thorsten Scherler (TS).

This is a list of other contributors:








Apache Infrastructure, Arturo Vazquez, Eric Burghard, Eric BURGHARD, Fabio Rinaldi, Florian G. Haas, Jan Materne, Johannes Schaefer, Juan Jose Pablos, Nick Chalko, Pierrick Brihaye, Ramón Prades, Rick Tessner, Rob Exley, Ross Gardler, Sebastian Bergmann, Stephan E. Schlierf, Unico Hommes.

7 Version 0.5.1 (2003-10-06)

7.1 Changes to Build

-  forrest.antproxy.xml script now properly fails when Cocoon fails Committed by JT.

7.2 Changes to the Code Base

-  Added obfuscate-mail-links skinconf.xml option, on by default. Committed by JT. See Issue [FOR-67](#).
-  Upgrade to Cocoon 2.1.2, which fixes a bug that caused some pages in a site not to be rendered from the command-line, and has some cosmetic improvements. Committed by JT. See Issue [FOR-66](#), [FOR-62](#).
-  In skinconf.xml, made project-description optional to keep compatibility with 0.4. Committed by JT.
-  Fix forrest-site tables bug that broke Opera Committed by JT. See Issue [FOR-65](#).
-  Fixed URLs for comma-separated bug keys in status.xml Committed by JT.
-  Fix bugs in forrest.bat|sh scripts encountered when used in odd environments (perl and Win9x). Committed by JT. See Issue [FOR-47](#), [FOR-48](#).
-  The 'forrest' command no longer sources /etc/antrc and ~/.antrc, which solves problems on some *nix distributions. Committed by JT.

7.3 Contributors to this release















We thank the following people for their contributions to this release.























This is a list of all people who participated as committers:





















Jeff Turner (JT).



















8 Version 0.5 (2003-09-13)

8.1 Changes to the Code Base

-  Added @label support for note and warning elements. Committed by SN.
-  Added ability to have version-specific overridden sitemaps. For example, src/documentation/sitemap-0.5.xmap will be used by Forrest 0.5 in preference to any others present in the same directory. This means a site with overridden sitemaps can build with Cocoon versions expecting different sitemap formats. Committed by JT.
-  Comma separated bugs have a link to bugzilla systems. Committed by JJP. Thanks to [Joerg Heinicke](#).
-  Now the Krysalis skin has javascript-collapsible menus. Committed by NKB.
-  Added a text2document.xsl stylesheet. Convert to unix format so it stop EOL character. Simplify so it does not use chaperon format. format. Committed by JJP. Thanks to [Dave Brondsema](#).
-  Added alternative menu/tab selection algorithm, that uses tab attributes in site.xml instead of relying on physical site structure (directories). Committed by JT.
-  Added a `forrest.maxmemory` property specifying the maximum amount of memory allocated to the JVM. Useful for rendering large PDFs. Added `forrest.jvmargs` property for other JVM options. Committed by JT.
-  On krysalis skin: users can select font size, reworked left-bar inclusion of page section titles, made them only one level deep, moved buttons after the left navbar, added publish date on top right navbar. For both Forrest and krysalis skins, added single background pixel line below unselected tabs and made selected tab more prominent. Committed by NKB.
-  Added XInclude capability to the documents. Remember to disable validations for files with xincludes as the xinclude is not performed during validation. Committed by NKB.
-  Added DocBook 4.2 and simplified DocBook 1.0 to the schemas and to the validation catalogue. Added Docbook and simplified Docbook rendering capability for documents. Committed by NKB.
-  Fixed `java.lang.reflect.InvocationTargetException` caused by catalog DTD HTTP lookup. The build had an extra and older `resolver.jar` Committed by DC.
-  Fix character return on line feed for fresh-site on the zip distribution Committed by JJP. See Issue [FOR-31](#).
-  New property "bugtracking-url" to allow a bug tracking systems other than bugzilla. Committed by JJP.
-  Added a "forrest clean" task that removes the project build directory. Committed by JJP. Thanks to [Eirik Bjørnsnøs](#).

-  Support for version, type and notice on html format. Committed by JJP. Thanks to [Eirik Bjørnsnøs](#).
-  Style information on the common skin. Committed by JJP. See Issue [FOR-34](#).
-  build directory created in wrong directories. Committed by JJP. Thanks to [Ross Gardler](#). See Issue [FOR-46](#).
-  On fresh-site: Synchronize size for group and project logo. Added description on site.xml elements so it displays tooltip. Committed by JJP.
-  Remove errors for fopx:bookmarks element. Committed by JJP. See Issue [FOR-43](#).
-  Allow images to scale on pdf output. Committed by JJP. Thanks to [J.Pietschmann](#).
-  Docbook table header is shifted one column. Committed by JJP. Thanks to [Ringo de Smet](#).
-  ihtml now works again. Had to add a jtidy configuration that prevented it to output tidies html to the pipeline, thus making the stylesheet unusable. Also had to fix the sitemap schema. Committed by NKB.
-  Cleanup maps:components definitions on sub-maps. Remove indent attr from the xsl:output as it is define on serializer. Move xsl:output for *2document.xml to "xml-document" serializer. Committed by JJP.
-  abstract element was ignored for html output. Committed by JJP. Thanks to [Eirik Bjørnsnøs](#). See Issue [FOR-51](#).
-  Unescape strings, so they display properly on the trail for all skins. Committed by JJP. Thanks to [Ramón Prades](#).
-  Use sync task to clean the tmp directory for xdocs. Committed by JJP. Thanks to [Dave Brondsema](#). See Issue [FOR-49](#).
-  Stopped the rewriting of extensions. Committed by JT.
-  Fixed bug that showed the krysalis-site skin in IE browsers from a remote site to start with a font size of 100. Also made the font size script kick in at the start of the page rendering, as before it resized only after all the page was loaded, which was not nice to say the least. Committed by NKB.
-  In PDFs, section titles are no longer numbered/reduced in size indefinitely. Committed by JT.
-  Make FAQ 'Questions' section more legible, and avoid duplicate numbering in FAQ PDF. Committed by JT.
-  Links to subdirectories no longer blow up the command-line rendering. Committed by JT.
-  Enable link rewriting for *.html files. Committed by JT.
-  Enable link rewriting for images and figures (@src attribute). Committed by JT.
-  Get breadcrumbs working in Mac IE 5, and don't capitalize the first letter of each link in the forrest-site skin. Committed by JT. Thanks to [Stefan Bodewig](#).
-  Fixed bug where absolute paths to images were created in the build/site directory. Committed by JT.
-  Get the Wiki syntax support working again. Committed by JT.

-  Fixed rendering of images in PDF for images not located in the resources/images dir. Committed by SN.
-  Add automatic (doctype-triggered) handling of todo and changes XML files, regardless of file name or location in the directory tree. The root changes.html and todo.html files are still generated from status.xml. Committed by JT.
-  In skins/common/xslt/html/tab2menu.xsl, renamed template 'unselected-tab-href' to 'calculate-tab-href', potentially breaking 3rd party skins. Committed by JT.
-  Fix menu bug where links with #fragment identifiers wouldn't display. Committed by JT.
-  Get images in PDFs working with FOP 0.20.x. This requires the user to download jimi.jar from [Sun](#) and place it in the lib/core (src distro) or WEB-INF/lib (binary distro) directory. Committed by JT.
-  On krysalis skin: fixed print css, also using text instead of logos and adding the footer, and changed link colors to blues and red for active links. Committed by NKB.
-  Fixed java.lang.NoClassDefFoundError: javax/servlet/ServletInputStream error. Committed by JT. Thanks to [Juan Jose Pablos](#).
-  Allow users to determine which URLs Forrest should ignore, by overriding stylesheets/filterlinks.xsl (and other stylesheets in that directory). Committed by JT.
-  Docbook stylesheet improvements. Committed by JT.
-  Fix a bug with forrest.antproxy.xml introduced in 0.4, which caused unresolved '\${project.home}' variables. Committed by JT.
-  In the forrest-site skin and derivatives, display the author and version at the bottom of the page, as krysalis-site does. Also added parsing for CVS Revision tags, so <version>\$Revision: 1.288 \$</version> can be used. Committed by JT.
-  Added email template for html content in common skin. Committed by JJP. Thanks to [Dave Brondsema](#).
-  Add description to {group, project} logo. Committed by JJP. See Issue [FOR-23](#).
-  Switched off skinconf.rnc validation to promote better forwards-compat. Committed by JT.
-  Upgraded to Cocoon 30/08/2003, now with ability to exclude URLs from being processed, in cli.xconf. Committed by JT.
-  Add "title" attribute to menu item links using the "description" attribute from entries in site.xml or book.xml Committed by DC. Thanks to [Ralf Hauser](#). See Issue [FOR-20](#).
-  The generated Tables of Contents can be configured to show a certain number of section levels. Default is two levels. Level 0 means show no ToC at all. See the fresh-site skinconf.xml for example usage. Committed by DC. Thanks to [Ramón Prades](#).
-  New 'expand-dtd' target for generating monolithic DTDs suitable for use in catalog-ignorant XML editors such as IDEA. Committed by JT.
-  site.xml changes now picked up without requiring a reload of the webapp. Committed by JT.
-  Updated to Cocoon 20/7/03, and use the new command-line (cli.xconf), which makes Forrest static rendering more than twice as fast as before. Committed by JT.

-  New Icons. Committed by NKB. Thanks to [Frederic Robesyn](#).
-  Updated Cocoon to -D "2003/06/22 12:00". This fixes a bug where files with unknown extensions were written with 'null' appended to their filename. Committed by JT.
-  Allow any sort of content inside `resources/`, which will be made available to the sitemap but not automatically copied to the generated site output. Committed by JT.
-  Add a flag for email obfuscation, and turn it off by default. Committed by JT.
-  Upgraded FOP from 0.20.4 to 0.20.5. Committed by JT.
-  Upgraded Cocoon to M2. Committed by JT.
-  The 'backcopy' command will now copy all types of custom content (*.xmap, skinconf.xml, xdocs, images, stylesheets, DTDs). Committed by JT.
-  Add a @indexfile attribute to tabs.xml, so that the user can specify which file the tab links to. Committed by JT.
-  Add <elaborate> to the FAQ <question> element, which lets one provide some background (elaboration) in the FAQ body without cluttering the FAQ list. Committed by JT.
-  Allow plain text (instead of just block-level elements) in the FAQ's <answer> element. Committed by JT.
-  Created new document-v12 DTD module, containing all DTD improvements made since 0.4 was released, and use it to define new v12 versions of all DTDs (document, howto, faq, etc). The doc-v12 DTD removes many restrictions in the DTD that were found to be unnecessary, and is closer to the HTML content model. A list of changes can be found in [the doc-v12 sample page](#). Committed by JT.
-  On the forrestbar, added a community menu, made 'AskSam' a resources submenu, moved the search part to the right. Committed by NKB.
-  On krysalis skin: fixed left navigation bar icons and sizing using divs instead of list elements, made all links underlined, added space to the bottom of the page text, and changed font increase-decrease links to buttons. Committed by NKB.
-  Enabled multiple output links on each page (print - pdf - xml) They can be enabled by adding the relative disable-`*-link` elements and setting them to false. Committed by NKB.
-  Upgraded to 2003-03-11 version of Cocoon Committed by JT.
-  Forrestbar is now [Phoenix](#) compatible. Committed by NKB.
-  Added links for both possible local forrests (port 8080 and 8888), and make them configurable in properties.xml. Thanks to Mark Vovsi for pointing it out. Committed by NKB.
-  Refactored the "transform-to-document" sitemap resource to do the the xinclude, linkrewriter, and idgen steps. Committed by NKB.

8.2 Changes to Documentation

-  Added new document to facilitate upgrading to v0.5 Committed by JT.

8.3 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:

















David Crossley (DC), Juan Jose Pablos (JJP), Jeff Turner (JT), Nicola Ken Barozzi (NKB), Steven Noels (SN).

This is a list of other contributors:


Dave Brondsema, Eirik Bjørnsnøs, Frederic Robesyn, J.Pietschmann, Joerg Heinicke, Juan Jose Pablos, Ralf Hauser, Ramón Prades, Ringo de Smet, Ross Gardler, Stefan Bodewig.

9 Version 0.4 (2003-02-12)

9.1 Changes to the Code Base

-  Added a minimal template skin. Committed by JT.
-  Use meaningful fragment identifiers in krysalis-skin. Committed by JT.
-  Correctly ignore @role='pdf' credits in HTML Committed by JT.
-  krysalis-site skin now works better with multi-level menus. Committed by NKB.
-  Normalize space in acronym titles. Committed by JT.
-  Make the forrestbot shell script work under Cygwin. Committed by MP.
-  Got skins working in the forrestbot. Committed by JT.
-  The problem with starting a new forked JVM is that all properties get lost. This makes it able to use one forrest.properties for all multiple projects, and just create the docs from there. Committed by NKB. Thanks to [Berin Loritsch](#).
-  The menu is now limited to only pages in the current subdirectory and below. Committed by JT. Thanks to [Bernhard Brandmair](#).
-  Added the cwiki stylesheets that were missing and an example in the fresh site seed. Committed by NKB. Thanks to [Cathy Zura](#).
-  Correctly serve swf files. Committed by JT.
-  Fix site: and ext: rewriting in book.xml, ihtml, ehtml and cwiki files in subdirectories. Committed by JT.
-  Added the CSS validation logo, fixed all skins' CSS to validate, minor fixes due to the switch to full HTML-loose DTD. Committed by NKB.
-  Make the forrest-site and krysalis-site skins more printer friendly by using CSS media type to hide navigations. the avalon-tigris skin already works well, the forrest-site one still needs tweaking. Committed by NKB.
-  Use full loose DTD specification for html pages. This also makes the avalon-tigris skin show the same in Mozilla and IE. Committed by NKB.
-  Switched all loglevels to ERROR. Committed by NKB.

9.2 Changes to Documentation

-  Added page for ForrestBar on the site with a simple link and an autoinstall link to the forrestbar.xpi generated by Gump every day. Committed by NKB.

9.3 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:



Jeff Turner (JT), Marc Portier (MP), Nicola Ken Barozzi (NKB).

This is a list of other contributors:









Berin Loritsch, Bernhard Brandmair, Cathy Zura.


















10 Version 0.3 (2003-01-30)

10.1 Changes to Build
















-  Allow configuration of a project local-catalog and the entity resolver verbosity level, via forrest.properties configuration. This replaces tokens in the default cocoon.xconf Committed by DC.
-  Make the seed project use the correct 'built with Apache Forrest' logo instead of Cocoon + Centipede logos. Committed by JT.

10.2 Changes to the Code Base


-  Added <acronym> tag. Committed by JT.
-  Added a means to override the check for existing content: `forrest seed - Dskip.contentcheck=yes` Thanks to Tom Klaasen. Committed by JT.
-  Added the possibility to use svg files instead png images. That is, if an image is found in the images dir that is svg and the browsers requests a png with the same name, the png is created from the svg automatically with batik. Committed by NKB.
-  Added the possibility to use wiki files in xdocs instead of xml files. They must have a .cwiki extension, and follow the chaperon wiki format ATM. Committed by NKB.
-  Added "Edit Page" button to edit the current page in Composer. Still needs an icon. Committed by NKB.
-  Added the possibility to use html files in xdocs instead of xml files. They must have an .html extension. Committed by NKB.
-  Added copyright statement to PDF footer (10pt, light-grey text). if a skinconf.xml 'credit' element has a role='pdf' attribute, this text will be used instead. Thanks to Keiron Liddle. Committed by JT.
-  New `site.xml` file in `content/xdocs`. This is used to implement <link href="site:internalURI"> 'semantic' links, <link href="ext:externalURI"> aliases to external links, and renders `book.xml` files obsolete. See [Menus and Linking](#) for more info. Committed by JT.

-  If `build/webapp/content/xdocs/*` is more recent than `src/*` equivalent, forrest webapp won't clobber it. A new `forrest backcopy` command will copy `build/webapp/content/xdocs` content back to `src/documentation/content/xdocs`. Committed by JT.
-  `forrest-site` skin is now HTML 4.0.1 compliant. The compliance validator logo can be switched off with a `skinconf.xml` element. Committed by JT.
-  Indirectly referenced files in skins (e.g. images in `CSSurl()`'s) are now copied across to the rendered site. Previously, we relied on spidering to cover the URI space, which has proved insufficient. Committed by JT.
-  HTML fragment identifiers for sections are now meaningfully named, based on the section title, rather than `document-id()`-generated characters. Committed by JT.
-  Fixed site regeneration bugs where changing the skin in `forrest.properties` had no effect after the first build. Committed by JT.
-  Now all files in `src/documentation/content` (except `xdocs`) and `src/documentation/resources/images` are copied across when Forrest generates a static site. This fixes the problem when an unparseable file links to another, and Cocoon can't crawl (and hence copy) the linked-to file. An example of this are `CSS url('foo.png')` image refs (so `krysalis-site` will now work properly). Also, large batches of pregenerated files like Javadocs will now be copied across instead of individually traversed. Committed by JT.
-  Now files present in the content dir are correctly linked and copied verbatim by the CLI. The wellknown files are given with the correct mime-type, and links in html and xml are followed. Committed by NKB.
-  Fixed a bug in the search form where there was no space between search term and 'site:' term. Search form also no longer requires Javascript. Committed by JT. Thanks to [Nick Chalko](#).
-  Fixed a bug where the no menu entry is 'selected' when in subdirectories. Committed by JT.
-  Now error reporting in CLI runs should work and show the cause of the error; before it was just reporting [broken link]. Committed by NKB.
-  Fixed a bug where multiple menu entries are highlighted if the filenames share a common prefix. Committed by JT.
-  Fixed a bug in `forrest.bat`, which would fail if run from a different drive to that Forrest was installed in. Committed by JT. Thanks to [Omar Belhaj](#).
-  Fix bug where the webapp would break due to missing XML jars under JDK 1.2/1.3. Committed by JT.
-  Moved credit and host logos to bottom left corner on `forrest-site` skin. Committed by JT.
-  Removed the 'basic' skin, to be shortly replaced with something much more maintainable. Committed by JT.
-  Removed some images (`built-with-cocoon.gif`, `centipede-logo-small.gif`) from the skins, and moved them to `src/documentation/resources/images`, as they are Forrest-specific. Committed by JT.
-  Lots of FAQ improvements: -Improved URI space by using `@id` attributes as the `#fragment-identifier` for `<faq>` and `<part>` elements. -Number FAQ entries and categories -Added back-links

from FAQ entries to the menu -Process tags in <question> in menu entries -Indent FAQ text -FAQ sample added to seed project Thanks to Joerg Pietschmann and Ralf Hauser for the suggestions. Committed by JT.

-  On avalon-tigris skin it's now possible to add a mysite.css file to customize the style. An example that can be used is from chaperon.sf.net. Also added a rounded corner to paragraphs, and many minor fixes. Committed by NKB. Thanks to [Stefan Michels](#).
-  Fixed the annoying link highlighting on the krysalis skin due to the border. Removed the border, now it highlights fine. Committed by NKB.
-  Updated part of the editor so that it now can save files in wiki format. Still needs more work. Committed by NKB.
-  Updated Batik Block so that now PNGs can be created correctly from SVG. Committed by NKB.
-  Updated some documentation, especially Forrestbot Introduction Committed by DC.
-  Update to 2002-12-26 Cocoon. Committed by JT.
-  Tweaked forrestbar, added a sub-project menu for Jakarta, fixed download link and added submenu for tools and gump. Committed by NKB.
-  Added rss capability to changes generation. Committed by NKB.
-  Added latest krysalis-site skin, using common templates where possible. There is a changes2rss stylesheet that still needs sitemap changes to run. Committed by NKB.
-  Now even the selected tab retains a link, to be able to easily select the main page of that tab even if it is "current". Committed by NKB.
-  Allow special handling of tab hrefs with #anchor references in them. By default, such menu links are always clickable. Committed by JT.
-  Updated avalon-tigris skin by merging what was in CVS here and what was used in Avalon with its Cocoon-generated site. The visual effect is the same to the current framework and Exalibur Avalon sites. Committed by NKB.
-  Updated latest Cocoon jars: chain metamodule name set to "forrest", and it is used instead of the default one. Committed by NKB.
-  Rewrite skins to share a common block of XSLT, which is used via <xsl:import>. This should make skin maintenance much easier. Committed by JT.
-  Added buttons for nightly Gump runs and local forrest. Corrected and completed existing interface, and made buttons flat (the bar is slimmer too). We need icons for the new buttons. Committed by NKB.

10.3 Changes to Documentation

-  Added enhancements to status.xml to comply with the needs for a complete status file, like other "STATUS" text files at Apache. Stylesheets not yet done. Committed by NKB.

10.4 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:




David Crossley (DC), Jeff Turner (JT), Nicola Ken Barozzi (NKB).

This is a list of other contributors:

Nick Chalko, Omar Belhaj, Stefan Michels.

11 Version 0.2 (2002-11-16)

11.1 Changes to the Code Base

-  Fixed bug where validation of xdocs was not descending into sub-directories. Committed by DC.
-  Fixed bug where changes to the breadcrumb links in skinconf.xml were ignored until the Forrest binary was rebuilt, or the project build/tmp/ deleted. Committed by JT.
-  Webapp now works under JDK 1.3 (parsers weren't being copied) Committed by JT.

11.2 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:










David Crossley (DC), Jeff Turner (JT).











12 Version 0.2rc1 (2002-11-13)

12.1 Changes to Project Administration








-  Initial Import Committed by SM.


















12.2 Changes to Build

-  Validate project sitemaps and choice of skin Committed by JT.
-  Included Jetty in the distro. type "forrest run" to have the ./build/webapp dir contents be run in a local web server, starting from http://localhost:8888/index.html Committed by NKB.
-  Added Jing "RELAX NG validator in Java" and initial grammar for skinconf.xml files. These config files now get validated during the build. Committed by DC.
-  User projects can now add custom classes and jars to Forrest doc builds. Useful for custom sitemap components, or overriding Forrest-provided jars. Committed by JT.
-  Added the forrestbot - infrastructure and configuration for remote project building. Committed by SN. Thanks to [Marc Portier](#).
-  Added a draft DTD for the Gump Descriptor forrest.xgump Committed by SN.
-  Forrest website is being automatically built and published to krysalis.org Committed by NKB.
-  Added simple xsl stylesheet for forrest.xgump. In IE6 and Mozilla 6 it renders using this, in older ones it uses the more simplifies CSS version. Committed by NKB.
-  Added Forrest to Gump runs. Committed by NKB.


-  Added simple css stylesheet for forrest.xgump. In IE and Mozilla 6 it renders. Committed by NKB.
-  Merged forrest needed info in forrest.xgump. Committed by NKB.
-  Imported Centipede as a build system. Committed by SN.
-  Building Forrest no longer requires a network connection (for downloading Centipede). It is buildable by typing 'ant' or with the provided build scripts. Committed by JT.
-  "Change History" images (update.jpg, add.jpg etc) are now provided by default by Forrest (in images/), and need not be supplied by user projects. Committed by JT.
-  The locations where Forrest expects doc files to be is now configurable via properties, that can be set in forrest.properties. Committed by JT.
-  User projects may now specify their own sitemap, overriding the Forrest-provided one. Committed by JT.
-  Updated Cocoon to 2.1-dev to use xsltc and new CLI status messages. Logs are in the build/work/WEB-INF/logs directory and the list of broken links is in the build directory. Committed by NKB.
-  Updated Centipede stuff to latest changes: - added lib/endorsed dir for endorsed jars that are put in global calsspath - changed the build scripts to not make direct reference to jar files - added "examples" dir in src and creation of examples jar in buils - added "testmodule" target to be run before committing stuff - added "gump" build to be run by Gump Committed by NKB.
-  Updated project descriptor: now it should be usable by Gump. Added basic Forrest descriptor. Committed by NKB.

12.3 Changes to the Code Base


















-  [SourceAction](#) or the so-called 'content aware pipelines' enables conditional processing of XML documents based on their grammar, being indicated by their DTD, XML Schema PI, root element, or a processing instruction (PI) in the prolog of the document. Committed by SN. Thanks to Bruno Dumon.
-  Validation of important core configuration files at build-time using RELAX NG. Committed by DC.
-  Now an id attribute on any XML element below <body> will be rendered as an anchor which can be linked to. Committed by JT.
-  Added alpha system for editing content in the webapp. To try it do "forrest run" and point the browser to http://localhost:8888/edit/. Committed by NKB.
-  Added avalon-tigris skin. Committed by JT. Thanks to [Peter Donald](#).
-  Added a docbook2document.xsl stylesheet to library/xslt. Committed by JT. Thanks to [Kevin Ross](#).
-  XML validation is now fully configurable through a hierarchical set of `forrest.validation.*{includes,excludes,failonerror}` properties. Committed by JT.

-  Validate XSLTs in user skins and `resources/stylesheets` directories. Committed by JT.
-  Enhanced forrest-site skin's tabs. Any URL (not just directories) can now be tabbed with a new 'href' attribute. There is an improved 'longest match' algorithm for deciding which tab is on which is more robust than the old one. Committed by JT.
-  Added a subdirectory to the template site and fixed all broken links. Committed by JT.
-  XML doc files are now validated before rendering with the 'validate' target. Uses OASIS catalogs provided by Forrest, optionally augmented by user project catalogs. Committed by JT.
-  User projects can now override the default `cocoon.xconf` and `logkit.xconf` files, by placing these files in `src/documentation/conf` Committed by JT.
-  added NekoDTD-based DTD documentation using a custom Cocoon Generator Committed by SN.
-  [draft forrest toolbar for Mozilla](#) Committed by NKB.
-  Initial import of [Libre](#) facility - replacement for `*/book.xml` Committed by SN. Thanks to [Marc Portier](#).
-  Refactored site generation stuff to use skins; still need to integrate with xforrest descriptor. Added jakarta-site, xml-apache-site, cocoon-printer skins. Committed by NKB.
-  Fixed selected menu link (meant to be inactive and yellow) Committed by JT.
-  Fixed webapp redirect problems under Tomcat and (sometimes) under Jetty. Committed by JT.
-  Now site builds do not delete files in `build/site` that are included in the Ant list of default excludes, like CVS info. Committed by NKB.
-  Fixed a bug where having a `tabs.xml` link to a file not otherwise mentioned in `book.xml` caused a broken link. See [forrest-dev discussion](#) Committed by JT.
-  The distribution no longer requires Ant to be preinstalled. Now, nothing but a Java installation is needed. Committed by JT.
-  Fixed `ClassNotFoundException` when running on JDK1.4.x Committed by JT.
-  Allow `xml:space='preserve'` attribute on `<p>` element, which preserves space without the changed font and block display that `<code>` uses. Committed by JT.
-  Fixed a bug where the log files weren't being created. Thanks to Vladimir Bossicard for reporting. Committed by JT.
-  Removed unmaintained skins: `avalon-site`, `jakarta-site`, `xml-apache-site`, Committed by JT.
-  Added a `convert` dir in the resources with stylesheets and buildfile to help convert Anakia and Maven-based sites. Committed by NKB.
-  Removed the dependency that the default "site" target had on `clean-site`. It means that running "forrest" will not delete the current files in `./build/site/**` . Committed by NKB.
-  Now Cocoon serves a file directly if the filename matches the one in `./src/documentation/contents/**` . Committed by NKB.
-  Put the internal matches in a separate pipeline with `internal-only="true"` . Committed by NKB.

12.4 Changes to Design

-  Designed a new skin for the Forrest documents. Particular attention to cross-browser issues. Committed by BK.

12.5 Changes to Documentation

-  Added new document [Standards Compliance](#) Thanks to Robert Koberg. Committed by DC.
-  Allow user to specify what XML files to validate via `forrest.validate.{includes,excludes}` properties. Committed by JT.
-  Added new document [Your Project - getting started with using Forrest](#) Committed by DC.
-  Added to the "forrest-site" skin the ability to split source code larger than 80 chars in two or more lines. Committed by NKB.
-  Replace the "forrest-site" skin with the new "bert" skin. Committed by DC. Thanks to Bert Van Kets.
-  Added breadcrumb trail script from the Avalon site skin. Committed by NKB. Thanks to Leo Simons.
-  Added initial "Dream List" by harvesting statements from the forrest-dev mail list. Committed by DC.
-  Added preliminary version of a scarab-like skin. Committed by NKB.
-  Fixed links in Forrest home page and added: contributing, mailing list, list archives, who we are. Committed by NKB.
-  Fixed all broken links in the Forrest site. Committed by JT.
-  Simplified the sitemap-stylesheet contract. Instead of 'dir' and 'resource' parameters with varying meaning, there is just one 'path' parameter. Committed by JT.
-  Fixed broken PDFs in most subdirectories. Committed by JT.
-  PDFs for faq, changes and todo now work. Committed by JT.
-  Made forrest-site skin fully generic, usable with any project. Skins are configured through an external 'skinconf.xml' file, specified by the project. Committed by JT.
-  Fixed bug where multiple copies of the same image were generated, one for each directory. Now all image links are page-relative, leading to a single copy. Committed by JT.
-  Fixed tab links, which were previously hardcoded and forrest-specific. They are now page-relative. tabs.xml file entries no longer have to end in '/'. Committed by JT.
-  Ensure that initial DTDs are valid and that the initial XML instances can be validated using these DTDs and OASIS Catalogs. Committed by DC. Thanks to [Steven Noels](#).

12.6 Contributors to this release

We thank the following people for their contributions to this release.

This is a list of all people who participated as committers:

Bert Van Kets (BK), David Crossley (DC), Jeff Turner (JT), Nicola Ken Barozzi (NKB), Stefano Mazzocchi (SM), Steven Noels (SN).

This is a list of other contributors:

Bert Van Kets, Bruno Dumon, Kevin Ross, Leo Simons, Marc Portier, Peter Donald, Steven Noels.

13 All Committers

This is a list of all people who have ever participated as committers on this project.

- Stefano Mazzocchi (SM)
- Sam Ruby (SR)
- John Morrison (JRM)
- David Crossley (DC)
- Steven Noels (SN)
- Nicola Ken Barozzi (NKB)
- Konstantin Piroumian (KP)
- Bert Van Kets (BK)
- Marc Portier (MP)
- Jeff Turner (JT)
- Juan Jose Pablos (JJP)
- Dave Brondsema (DB)
- Antonio Gallardo (AG)
- Reinhard Pötz (RP)
- Ross Gardler (RDG)
- Thorsten Scherler (TS)
- Rick Tessner (RFT)
- Ferdinand Soethe (FSO)
- Johannes Schaefer (JS)
- Cyriaque Dupoirieux (CD)
- Bertrand Delacretaz (BD)
- Tim Williams (TWW)
- Diwaker Gupta (DG)
- Gavin McDonald (GM)
- Sjur N Moshagen (SNM)
- Brian M. Dube (BMD)
- Jeremias Maerki (JM)
- Volunteer needed (open)