



ATLAS Releases and Validation

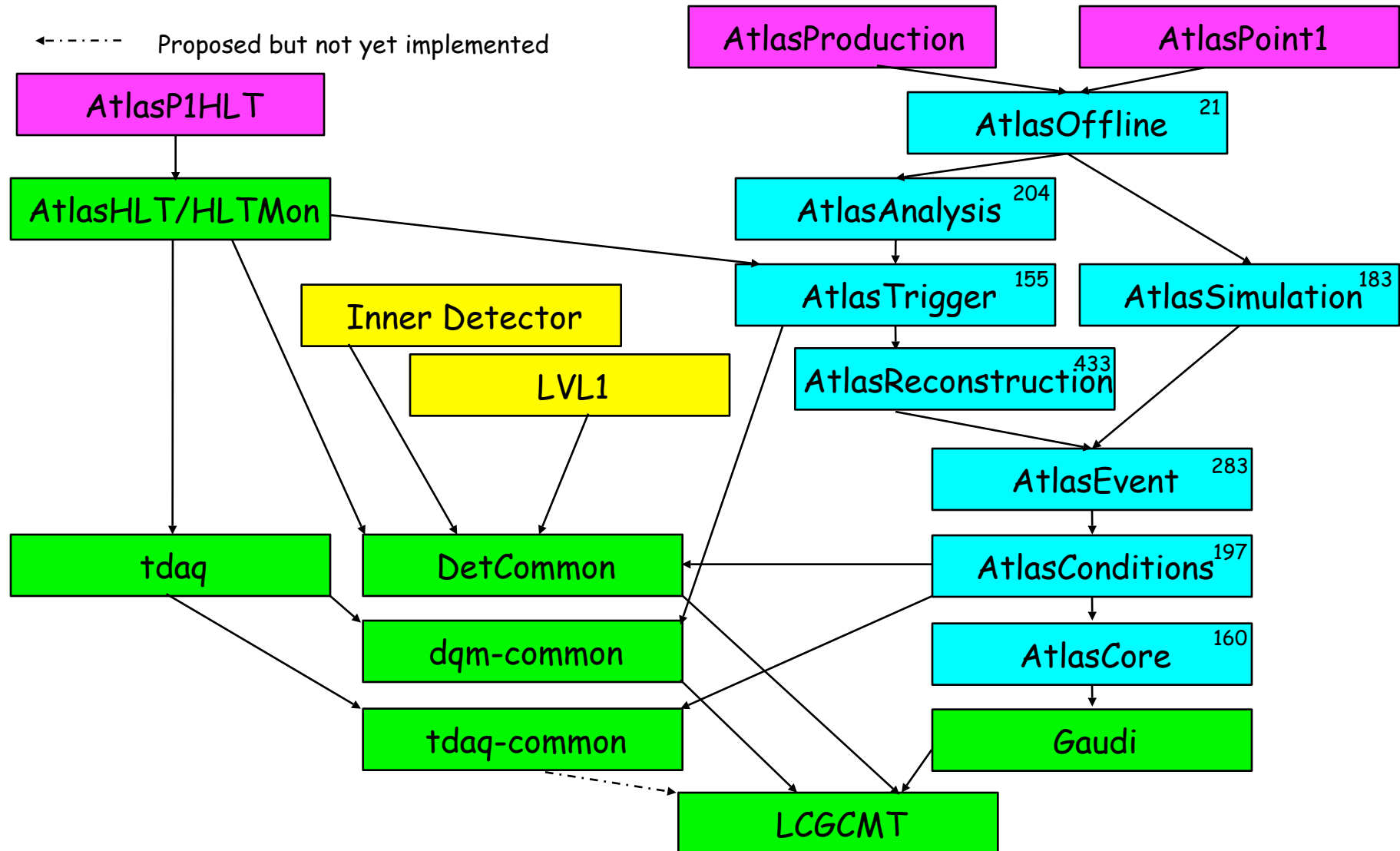
David Quarrie
on behalf of the
ATLAS Software Infrastructure Team



Software Structure

- C++ or Python classes
 - Some FORTRAN code (mainly generators but some muon and magnetic field)
- Packages
 - Management Unit
 - Container or Leaf
 - Container just corresponds to a directory (no other content allowed)
 - Leaf contains source code and/or scripts
 - Some leaf packages act as "glue" to external software packages
- Projects
 - Groups of packages having similar dependencies built as a unit
- CMT used as code management tool
 - Expresses package dependencies and constituents (libraries etc.)
 - Used as build tool

Project Dependencies





Projects

- Differentiate between internal and external projects
- Project names are indicative, not definitive
 - Sometimes assignment of package to project driven by dependencies
- Packages cannot depend upon packages in higher level (or parallel) projects
- Glue/Interface projects provide decoupling
 - And interfaces to external software
- In principle the projects can evolve at different rates
 - But in practice this is only done against external projects
 - And for partial builds (see later)



Tag Collector

- Web-based tool for managing projects and releases
- A project release is a coherent set of unique package versions
 - Package versions of form Pkg-ii-jj-kk[-ll]
 - 4-digit form corresponds to patch (typically a CVS branch)
- A full release is a coherent set of project releases
 - Releases of form 1.2.3 (3-digits)
 - Patch projects (see later slide) of form 1.2.3.4 (4-digits)
- The Tag Collector allows
 - Packages to be associated with projects
 - Package versions to be associated with releases
 - Project dependencies to be specified



http://atlastagcollector.in2p3.fr/AMI/servlet/net.hep.atlas.Database.8...al/jakarta-tomcat-5.0.28/webapps/AMI/AMI/xsl/AMIXmlToHtmlFrameset.xsl

http://atlastagcollector.in2p3.fr/AMI/servlet/net.hep.atlas.Database.Bookkeeping.AMI.Servlet.Com... Google

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NICOS common page Draft agenda: ATL... Tier-0 Monitoring ... Atlas Generators -... Swisscom - Reside... http://atlastagcoll... HepMC - a C++ Ev...

Architecture Users Packages Zoom ? Help Report Contact Todo Register Certificate AMI Hon

Project group tree

- AtlasProjects
 - AtlasHLT
 - AtlasP1HLT
 - AtlasHLTSave
 - AtlasOffline
 - AtlasAnalysis
 - AtlasConditions
 - AtlasCore

Information about group AtlasOffline

General group information

groupName	validGroup	physicsDescription	computingDescription	comment	created	groupPath
AtlasOffline	yes	-	-	-	2005-12-15 09:33:22	/

Group coordinators

Group_Coordinator	lastName	firstName	mail	telephone	fax	amiLogin
?	Gallas	Manuel	mgallas@mail.cern.ch	00 41 22 7676772		Gallas

Available commands : AtlasOffline

Most Used :

- ManageBundle

Guest User :

- ListPackageFromGroup

Group Coordinator :

- ChangeGroupName
- CreateRelease
- DefineAsGroupCoordinator
- RemoveGroup
- RestoreRelease
- SetGroupInfo
- UndefineAsGroupCoordinator

Project Coordinator :

- CreateGroup
- ManageBundle

Package tree

- 14.1.0 (browse)
 - 14.1.10 (browse)
- 14.0.0 (browse)
 - 14.0.10 (browse)
- 13.2.0 (browse)
- 13.1.0 (browse)
- 13.0.0 (browse)
 - 13.0.X-LCG (browse)
 - 13.0.X-MIG0 (browse)
 - 13.0.X-MIG1 (browse)
 - 13.0.40 (browse)

AMI

http://atlastagcollector.in2p3.fr/AMI/servlet/net.hep.atlas.Database.8...al/jakarta-tomcat-5.0.28/webapps/AMI/AMI/xsl/AMIXmlToHtmlFrameset.xsl

http://atlastagcollector.in2p3.fr/AMI/servlet/net.hep.atlas.Database.Bookkeeping.AMI.Servlet.Com... Google

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Release tree of group AtlasCore

(switch to logical view)

AtlasCore (view archived releases)

- 14.2.0 (browse)
 - 14.2.X-LCG (browse)
 - 14.2.X-LCG1 (browse)
 - 14.2.X-LCG3 (browse)
 - 14.2.X-MIG0 (browse)
 - 14.2.X-MIG1 (browse)

Information about release 14.2.0 of group AtlasCore

General release information

releaseName	groupName	status	description	CMTVersion	externalSWVersion	platformCompilers	isPatch	releaseBas
14.2.0 dependencies TagApproval	AtlasCore	Terminated	Production Release	v1r20p20080222		SLC4/gcc43 32-bit and 64-bit	false	leafBased

Release direct children dependencies

releaseName	groupName	status	description	CMTVersion	externalSWVersion	platformCompilers	isPatch
tdaq-common-01-09-03	tdaq-	Terminated					false

Package version tree of release 14.2.0

(collapse all)

- 14.2.0 (switch to tree with dependencies)
 - AtlasCoreRelease-AtlasCore-00-00-69
 - AtlasCoreRunTime-00-00-14
 - AtlasCxxPolicy-00-00-34
 - AtlasFortranPolicy-00-00-48
 - AtlasGeometryCommon
 - Interpreters-00-00-09
 - AtlasPolicy-01-06-59
 - AtlasSystemSettings-00-00-02

Available commands :

AtlasCore 14.2.0 (switch to group tree view)

Most Used :

- ManageBundle
- TagApproval

Guest User :

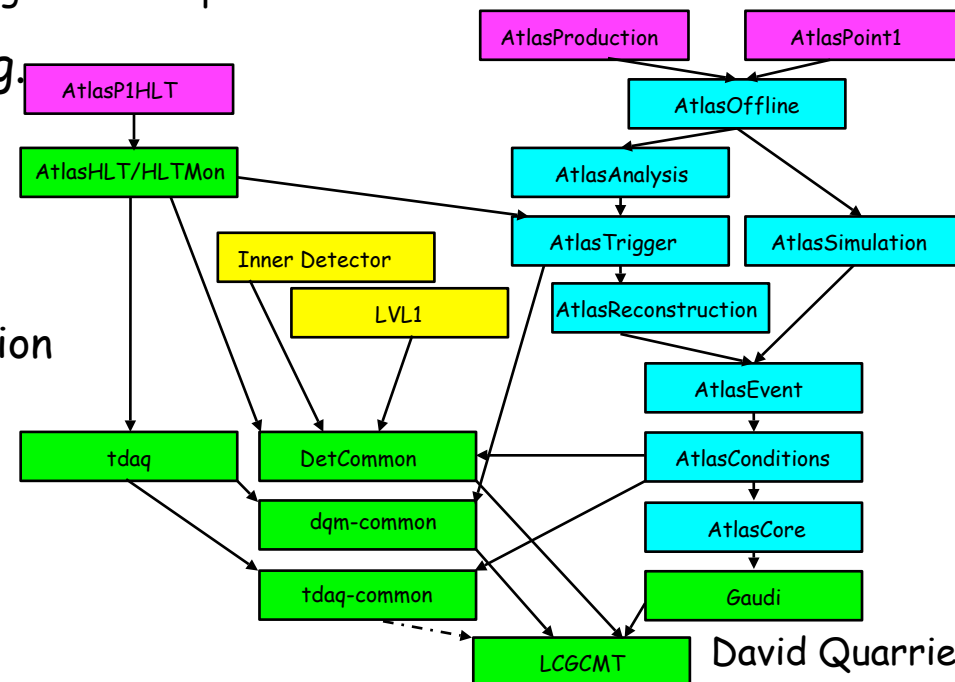
- GetCVSrtag
- GetGroupDependencyGraph
- GetReleaseDiff
- GetReleasePackageVersionHistory
- GetValidCMTRequirementFile
- PackageStats
- ReleaseOperationsStats
- TagApprovalList

Release Coordinator :

- AddGroupDependency
- AllowOnlyUpdates
- ArchiveRelease

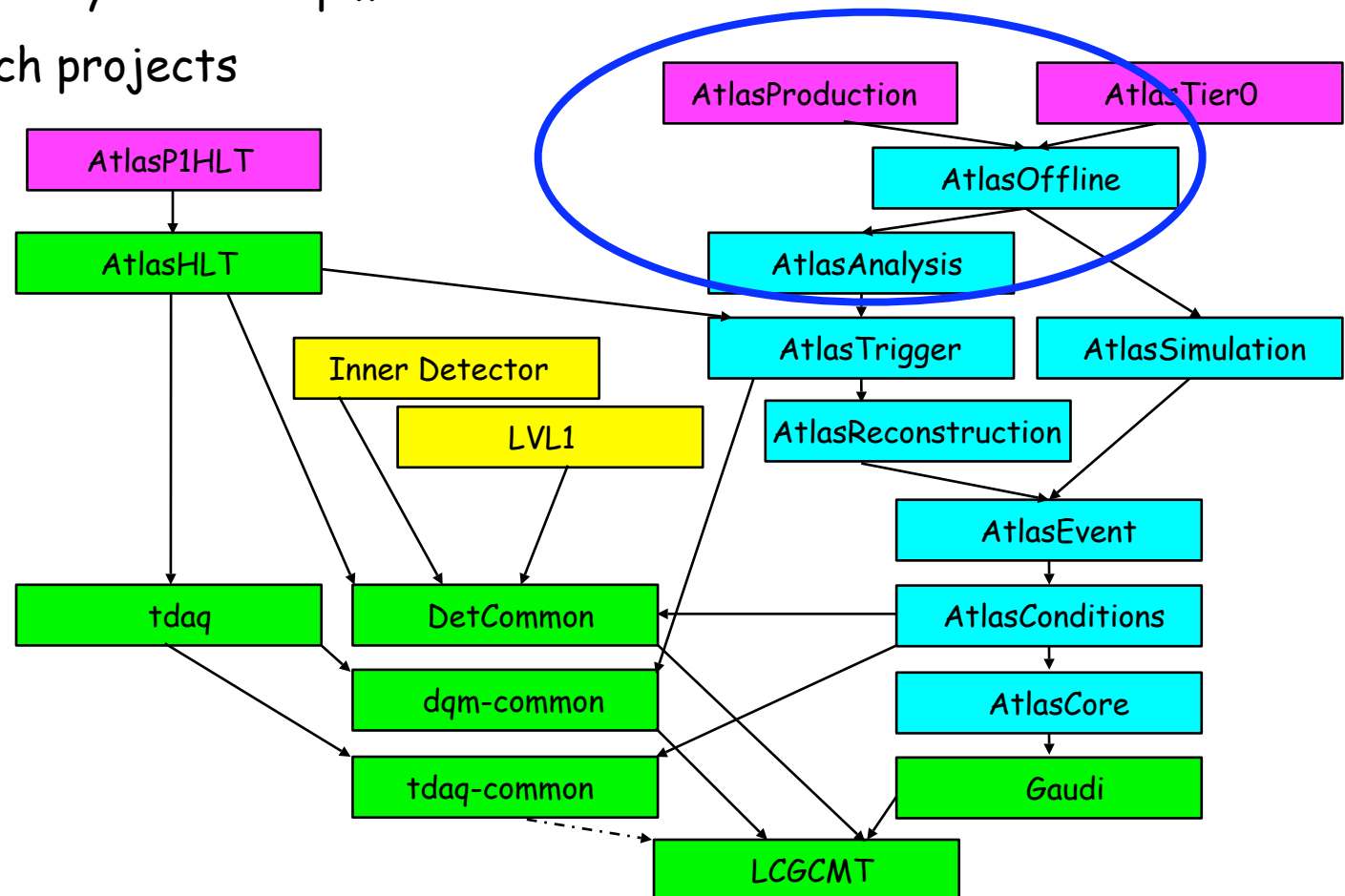
Patch Projects

- Special projects that sit at top of project hierarchy
- Prepend to various paths (PATH, LD_LIBRARY_PATH, PYTHONPATH, etc.)
- Contain package override versions
- Patches restricted to Python, scripts, and C++ .cxx files
 - Unless a C++ .h file is private to the package or has only a few client packages
 - In the latter case the clients must also go into the patch release
- Multiple patch projects supported - e.g.
 - One for Tier0 fixes requiring rapid turn-around and reduced validation
 - One for GRID deployment needing less rapid turn-around but increased validation



Partial Releases

- Allows higher level releases to evolve against stable lower levels
- Used for physics analysis development
- Allows use of patch projects



Tag Approval

- Open Tag Approval
 - Developers can just update the version for their packages within a release
- Restricted Tag Approval
 - Developers submit tag requests for their packages within a release
 - Project Release Coordinators can accept/validate/reject/request-info
 - See later slide about validation
- Closed Tag Approval
 - Only release coordinators can submit tag requests
- Tag Bundles
 - Groups of packages that must be dealt with together




Tag Collector 2 developer page

http://atlastagcollector.in2p3.fr/AMI/servlet/net.hep.atlas.Database.Bookkeeping.AMI.Servlet.Comma ~ Google

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Tag Collector 2 developer ...

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Tag Collector  quarrie Logout

TagApproval : TagApprovalList - Manage Bundles (AtlasCore_14.2.10) (AtlasTrigger_14.2.10) (AtlasAnalysis_14.2.10) (AtlasConditions_14.2.10) (AtlasEvent_14.2.10 (pending)) (AtlasOffline_14.2.10 (pending)) (AtlasSimulation_14.2.10) (AtlasReconstruction_14.2.10 (pending))

Managing bundle: PileUpLeaks ▾

Your decision

☐ Pending ☐ Accept ☐ Validate ☐ Request Feedback ☐ Reject

Comment

☐ Disable mails


Submit

bundleName	status	submitted	lastModified	validationDate
PileUpLeaks	validating completed bundle	2008-06-28 02:13:11	2008-06-28 02:16:27	2008-06-28 02:16:27

List of package versions part of the bundle

GroupName	ReleaseName	PackageTag	Action	CurrentStatus	FullPackageName
AtlasCore	14.2.X-MIG4	AthenaKernel-00-23-03 (current: no version)	add	validating	/Control/AthenaKernel
AtlasCore	14.2.X-MIG4	PileUpComps-00-04-02 (current: no version)	add	validating	/Control/PileUpComps
AtlasCore	14.2.X-MIG4	PileUpTools-01-03-01 (current: no version)	add (end)	validating	/Control/PileUpTools

Back

AMI Command  Bookmark



NICOS - NIghtly COntrol System

- Nightly build system runs on suite of Ixbuild machines at CERN
- Several different branches open simultaneously
- Several different platforms
 - Although currently SLC4 is the only production validated platform
- Multiple multi-core machines allow parallelism
 - Different branches run on different machines
 - Different platforms within same branch run on different machines and merged on AFS
 - Some projects have no cross-dependencies and could be built in parallel on multi-core machine (not actually doing this at the moment since gain not worth it)
 - Tbbroadcast provides package level parallelism within project
 - Packages within project with no cross-dependencies built in parallel
 - Distcc/gmake -j<n> provides file level parallelism within package
 - Several distcc servers do compilation after macro/header expansion
 - Incremental builds
 - Only checkout changed packages and rebuilt them and clients



NICOS NIGHTLIES SUMMARY

NEW: [build nodes info](#)

Last modified Wed, 02 Jul 2008 06:05:07 GMT

This web page shows the list of ATLAS nightlies (see [twiki page](#) for details). Some nightlies are not added to this list: [experimental nightlies](#), [MAC nightlies](#), [doxygen builds](#) as well as [stable releases](#).

Nightly testing summaries: ATN ([rel_0](#), [rel_1](#), [rel_2](#), [rel_3](#), [rel_4](#), [rel_5](#), [rel_6](#), also accessible from nightly web pages), [RTT](#), [FCT \(AID scans\)](#).

Message of a day about nightlies problems and usability

30 May 2008: power outage, most Friday's nightlies are not completed
 24 - 27 May 2008: kernel upgrades caused occasional nightlies failures (in particular 14.1.0.Y, LCG3, MIG0)
 20 May 2008: development validation rel_2 nightlies delayed by 6 hours (to get new AthenaServices version)
 12 May 2008: development rel_6 and rel_8 nightlies failed, rel_1 delayed because of looping during compilation of one of AtlasTrigger packages

Nightly Title	# Platforms	# Projects	Latest Rel.	Build	Date	Copy	Ave. Failed Builds	Ave. Test Success(%)
MAJOR NIGHTLIES								
14.2.X	4	11	rel_3	done	07/02 07:51	done	0.5	71.9
14.2.X-VAL	2	11	rel_3	done	07/02 07:22	done	0.5	76.6
Kit_14.2.X	2	1	rel_2	done	07/01 12:39	N/A	0	0
ATLASPOINT1 AND ATLASPRODUCTION NIGHTLIES								
13.0.40.Y	2	1	rel_2	done	07/01 06:40	done	0	30.5
14.0.10.Y	2	1	rel_3	done	07/02 04:04	done	0	57.0
14.1.0.Y	2	1	rel_3	done	07/02 05:58	done	0	0
14.1.0.Y-VAL	1	1	rel_3	done	07/02 03:07	done*	0	0
14.2.0.Y	1	1	rel_3	done	07/02 00:55	done	0	52.0
14.2.0.Y-VAL	1	1	rel_2	done	07/01 14:57	done	0	67.0
14.2.5.Y	2	1	rel_3	done	07/02 00:05	done	0	0
Kit_Pnt_14.0.10.Y	1	1	rel_3	done	07/02 04:19	N/A	0	0
Kit_Pnt_14.1.0.Y	1	1	rel_3	done	07/02 06:23	N/A	0	0
Kit_Pnt_14.1.0.Y-VAL	1	1	rel_3	done	07/02 05:00	N/A	1	0
Kit_Pnt_14.2.5.Y	1	1	rel_3	done	07/02 01:28	N/A	0	0
Kit_Prod_13.0.40.Y	2	1	rel_2	done	07/01 04:59	N/A	0	0
Kit_Prod_14.2.0.Y	1	1	rel_3	done	07/02 02:44	N/A	0	0
OTHER NIGHTLIES								
14.2.X-LCG1	1	10	rel_1	done	06/30 18:18	done	121.1	5
14.2.X-LCG3	1	10	rel_2	done	07/01 17:56	done	125.0	23.5
14.2.X-MIG0	1	11	rel_1	done	07/02 04:09	done	0.5	70.1
14.2.X-MIG1	1	10	rel_1	done	07/02 06:02	done	1	56.5



NICOS common page

http://atlas-computing.web.cern.ch/atlas-computing/links/distDirectory/nightlies/global/index14 Google

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NICOS common page Draft agenda: ATL... Tier-0 Monitoring ... Atlas Generators - ... Swisscom - Reside... http://atlastagcoll... HepMC - a C++ Ev...

NICOS version 1.2.0

NICOS PROJECTS FOR 14.2.X-VAL NIGHTLIES

[full list of tags](#)

Last modified Wed, 02 Jul 2008 05:33:38 GMT

Project	Platform	Latest	Build	Copy	Test	Date	Failed Bids	Test OK(%)	NICOS Suffix
AtlasCore	686-slc4-qcc34-dbg	rel_3	done	done	done	07/01 23:19	0	N/A	VAL142X32BS4CoreDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 00:26	0	100	VAL142X32BS4CoreOpt
DetCommon	686-slc4-qcc34-dbg	rel_3	done	done	done	07/01 23:20	0	N/A	VAL142X32BS4DetDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/01 23:32	0	0	VAL142X32BS4DetOpt
AtlasConditions	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 00:23	0	N/A	VAL142X32BS4CondDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 00:46	0	100	VAL142X32BS4CondOpt
AtlasEvent	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 01:36	0	N/A	VAL142X32BS4EvtDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 02:11	0	81	VAL142X32BS4EvtOpt
AtlasReconstruction	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 03:26	0	N/A	VAL142X32BS4RecDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 05:48	0	78	VAL142X32BS4RecOpt
AtlasSimulation	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 04:08	0	N/A	VAL142X32BS4SimDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 07:36	0	85	VAL142X32BS4SimOpt
AtlasTrigger	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 05:41	0	N/A	VAL142X32BS4TrgDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 07:35	0	45	VAL142X32BS4TrgOpt
AtlasAnalysis	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 06:56	5	N/A	VAL142X32BS4AnlDbg
	686-slc4-qcc34-opt	rel_3	done	done*	work	07/02 07:05	5	N/A	VAL142X32BS4AnlOpt
AtlasOffline	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 07:07	0	N/A	VAL142X32BS4OffDbg
	686-slc4-qcc34-opt	rel_3	done	done*	work	07/02 07:16	0	N/A	VAL142X32BS4OffOpt
AtlasProduction	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 07:10	0	N/A	VAL142X32BS4ProdDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 07:20	0	100	VAL142X32BS4ProdOpt
AtlasPoint1	686-slc4-qcc34-dbg	rel_3	done	done	done	07/02 07:11	0	N/A	VAL142X32BS4PntDbg
	686-slc4-qcc34-opt	rel_3	done	done	done	07/02 07:22	0	100	VAL142X32BS4PntOpt

NEW: the "globe and envelope symbol" indicate that the automatic e-mails about build or test problems are sent

- This page shows the list of 14.2.X-VAL nightly projects managed by the [NICOS system](#)
- Click [here](#) to get a list of all nightlies available
- Click on the platform name to get the results for all releases available (for particular project and platform)
- Click on the latest release name to get the summary of build and test results for the upstream project (for particular platform)

[Send comments or questions about NICOS](#)



nicos webpage with build results

http://atlas-computing.web.cern.ch/atlas-computing/links/distDirectory/nightlies/VALWebArea/n

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nicos webpage wit... Draft agenda: ATL... Tier-0 Monitoring ... Atlas Generators ... Swisscom - Reside... http://atlastagcoll... HepMC - a C++ Ev...

NICOS (Nightly Control System) build results

Project: AtlasAnalysis
Release: rel_3 -- Built from scratch on: lxbuild080.cern.ch
 other releases available: [rel_0](#) [rel_1](#) [rel_2](#) [rel_4](#) [rel_5](#) [rel_6](#)
 tags for 14.2.10 TagApproval combined; option: 32bit dbg; CMT v1r20p20080222; i686-slc4-gcc34-dbg
 Work area for incrementals: /build/atnight/localbuilds/nightlies/val/AtlasAnalysis/rel_0
 Releases are copied to: /afs/cern.ch/atlas/software/builds/nightlies/val/AtlasAnalysis
 Highlighted packages have problems, click on names to see [logfiles](#)

Last modified Wed, 02 Jul 2008 04:56:36 GMT

Integration+Unit tests results (click for [details](#) or [cumulative results](#))

passed: **0 + 0** failed: **0 + 0**

Also available [RTT](#), [FCT](#)(by AID), and [AID post-processing checks](#)

Build results for individual packages. Sorted by:

[packages names, failures first](#) [build order](#) [containers names](#)

Package Name	Container	Build	Checkreq	Unit Test	Manager(s)
MuonInSituPerformance	MuonSpectrometer/MuonValidation	✗	N/A	N/A	nectarios.benekos at cern.ch, massimiliano.bellomo at pv.infn.it
MuonRawDataMonitoring	MuonSpectrometer/MuonValidation/MuonDQA	✗	N/A	N/A	nectarios.benekos at cern.ch
MuonRecValidator	MuonSpectrometer/MuonValidation	✗	N/A	N/A	nectarios.benekos at cern.ch, massimiliano.bellomo at pv.infn.it
MuonValUtils	MuonSpectrometer/MuonValidation	✗	N/A	N/A	nectarios.benekos at cern.ch, massimiliano.bellomo at pv.infn.it
gammaAnalysis	Reconstruction	✗	N/A	N/A	zerwas at lal.in2p3.fr, daniel.froidevaux at cern.ch, theodore.todorov at cern.ch
HiggsToFourLeptons	PhysicsAnalysis/HiggsPhys	⚪	N/A	N/A	stefano.rosati at cern.ch, andrea.di.simone at cern.ch, daniela.rebuzzi at pv.infn.it
AAna	PhysicsAnalysis/BPhys	✓	N/A	N/A	james.catmore at cern.ch, maria.smizanska at cern.ch
ARATools	PhysicsAnalysis	✓	N/A	N/A	nobody
AnalysisExamples	PhysicsAnalysis/AnalysisCommon	✓	N/A	N/A	ketevi at bnl.gov, sebastien.binet at cern.ch, jain2 at indiana.edu, laurent.vac
AnalysisLiveXML	PhysicsAnalysis/AnalysisEventDisplay	✓	N/A	N/A	sboeser at hep.ucl.ac.uk, e.jansen at hef.ru.nl, nikolaos.konstantinidis at cern.ch
AnalysisRunTime	PhysicsAnalysis/AnalysisCommon	✓	N/A	N/A	ketevi at bnl.gov
AnalysisTest	PhysicsAnalysis/AnalysisCommon	✓	N/A	N/A	tmaeno at bnl.gov, sebastien.binet at cern.ch, andreas.wildauer at cern.ch
AnalysisTriggerTools	PhysicsAnalysis/AnalysisTrigger	✓	N/A	N/A	andrea.di.simone at cern.ch, stefano.rosati at cern.ch
AraToolExample	PhysicsAnalysis	✓	N/A	N/A	yyao at lbl.gov
AssociationComps	PhysicsAnalysis/AssociationBuilder	✓	N/A	N/A	sebastien.binet at cern.ch
AssociationKernel	PhysicsAnalysis/AssociationBuilder	✓	N/A	N/A	sebastien.binet at cern.ch
AssociationUtils	PhysicsAnalysis/AssociationBuilder	✓	N/A	N/A	ketevi at bnl.gov, sebastien.binet at cern.ch

NICOS Details

- Automatic email notification of errors
- Indication of "severe" compilation warnings
 - E.g. Control reaches end of non-void function
- Indication of inconsistencies in package dependencies
 - Use of header file without specifying package dependency
 - Disallowed package dependencies
 - Packages with dependencies against packages in higher projects



Special Nightlies

- Goal is to keep the primary nightlies as stable as possible
- Validation nightlies
 - Tags that have been put into validation (rather than accepted) run in a special validation nightly
 - E.g. 14.2.10-VAL
 - If there are no side effects and requests work as expected, they can be accepted
- Migration nightlies
 - Branches in Tag Collector where package tags override those in the primary nightlies
 - E.g. 14.2.X-MIG1
 - Used for disruptive migrations
 - E.g. For new GAUDI versions; EDM changes etc.
- LCG nightlies
 - Builds against LCG-AA nightly builds

Introduction

This page summarizes the nightly builds including the special purpose and migration nightly builds, in particular the role (which varies as a function of time), details (how many days the cycle covers, the CMTCONFIG version(s)) and the responsible person(s). The **TAG** column indicates the [AtlasLogin](#) environment setup tag that should be specified in order to access the corresponding nightly. The **Deadline** for tag submission is given in the CERN timezone. The primary NICOS page is located [here](#).

Primary Nightly Builds

NAME	CYCLE	Deadline	CMTCONFIG	TAG	DESCRIPTION	COORDINATOR(S)
14.2.X	rel_0-rel_6	21:00	i686-slc4-gcc34-opt/dbg, x84_64-slc4-gcc34-opt/dbg	bugfix	Primary nightlies leading up to 14.2.10	EmilObreshkov , DmitryEmeljanov
14.2.X-VAL	rel_0-rel_6	21:00	i686-slc4-gcc34-opt/dbg	bugfix, val	Package tags undergoing validation	EmilObreshkov , DmitryEmeljanov

Patch Nightly Builds

NAME	CYCLE	Deadline	CMTCONFIG	TAG	DESCRIPTION	COORDINATOR(S)
14.2.0.Y	rel_0-rel_6	21:00	i686-slc4-gcc34-opt	14.2.0.Y	Patches for 14.2.0.Y (AtlasProduction)	AndresPacheco , ManuelGallas
14.2.0.Y-VAL	rel_0-rel_6	11:00	i686-slc4-gcc34-opt	14.2.0.Y-VAL	Validation for 14.2.0.Y (AtlasProduction)	AndresPacheco , ManuelGallas
14.1.0.Y	rel_0-rel_6	21:00	i686-slc4-gcc34-opt/dbg	14.1.0.Y	Patches for 14.1.0.50+ (AtlasPoint1) M7 Tier0 Re-processing	MariaCosta ?, JamieBoyd
14.1.0.Y-VAL	rel_0-rel_6	10:00	i686-slc4-gcc34-opt	14.1.0.Y-VAL	Patches/Validation for 14.1.0.14+ (AtlasPoint1) FDR2 Tier0 Processing	DavidRousseau , SebastianSchaetzel
14.1.0.Y	rel_0-rel_6	19:45	i686-slc4-gcc34-opt	14.1.0.Y	Patches for 14.1.0.Y (AtlasProduction)	AndresPacheco , ManuelGallas
13.0.40.Y	rel_0-rel_6	18:00	i686-slc3-gcc323-opt, i686-slc4-gcc34-opt/dbg	point1 or pcache	Patches for 13.0.40 (AtlasProduction)	AndresPacheco

Special and Migration Nightly Builds

The usage of these was last checked on 18 June 2008.

NAME	CYCLE	Deadline	CMTCONFIG	TAG	DESCRIPTION	COORDINATOR(S)
14.2.X-LCG	rel_0-rel_6	10:00	i686-slc4-gcc34-dbg, i686-slc4-gcc41-opt	lcg	Built against LCG "dev" slot (GAUDI ATLAS and LCG-preview)	EmilObreshkov , DavidQuarrie
14.2.X-LCG1	rel_0-rel_6	10:00	i686-slc4-gcc34-opt	lcg1	Built against LCG "dev1" slot (GAUDI ATLAS and LCG-55 - no SEAL)	EmilObreshkov , DavidQuarrie
14.2.X-LCG3	rel_0-rel_6	10:00	i686-slc4-gcc34-dbg	lcg3	Built against LCG "dev3" slot (GAUDI ATLAS and LCG_54-patches)	EmilObreshkov , DavidQuarrie
14.2.X-MIG0	rel_0-rel_1	21:00	i686-slc4-gcc34-dbg	mig0	Geant4.9.1 migration	AndreaDeLAcqua , ZacharyMarshall
14.2.X-MIG1	rel_0-rel_1	21:00	i686-slc4-gcc34-dbg	mig1	Physics Analysis Development	SvenMenke , StathisPaganis
14.2.X-MIG2	rel_0-rel_1	21:00	i686-slc4-gcc34-opt	mig2	Tracking migrations (several)	AndreasWildauer
14.2.X-MIG3	rel_0-rel_1	21:00	i686-slc4-gcc34-opt	mig3	Calo EDM and Muon Combined Performance EDM migrations	KetevAssamagan , GuillaumeUnal
14.2.X-MIG4	rel_0-rel_1	21:00	i686-slc4-gcc34-opt	mig4	AthenaBarCode Migration	YushuYao , PaoloCalafura
14.2.X-MIG5	rel_0-rel_1	21:00	i686-slc4-gcc34-dbg	mig5	TileConditions migrations (Free from now on 23 June)	Main.SashaSolodkov
14.2.X-MIG6	rel_0-rel_1	21:00	i686-slc4-gcc34-dbg	mig6	Trigger EDM Migration (Free from now on 23 June)	JohnBaines

Instructions for Developers submitting tags to Special and Migration Nightlies

The normal Tag Collector tag approval procedures can be used in order to allow developers to submit tags to these special nightlies. The instructions are identical to those for [inserting tags into patch projects](#).

Instructions for Release Coordinators

For each of the migration and special purpose nightlies listed above, someone will be designated to be the Release Coordinator. This will typically be for a finite duration, being the time taken by a single migration. The release coordination has control over adding, updating and removing packages in these branches. Any package and version that is inserted into such a branch will override the equivalent package and version in the baseline branch. Such overrides should be confined to the same release as for the baseline branch. Thus, if a package in the baseline is 14.1.0.50, the override should also be inserted into 14.1.0.50 or 14.1.0.51, not into 14.1.0.52 or 14.1.0.53.



Validation/Test Scaffolds

- ATN (ATNight)
 - Unit and component tests run inline with release builds
 - Restricted statistics since run on single machine
- RTT (RunTimeTester)
 - ~20 lxbatch machines dedicated to tests (~100s of tests)
 - Typically ~few hours
- FCT (Full Chain Tests)
 - Tests that cover all production jobs (~10s of tests)
 - Generation, simulation, digitization, reconstruction, etc.
 - Scale of ~100s events (~4 hours)
- Tier0 Tests
 - Tests that replicate Tier0 processing
 - Reconstruction, monitoring, merging, TAG and DPD creation etc.
 - Scale of ~10,000-100,000 events

http://atlas-project-rtt-results.web.cern.ch/atlas-project-rtt-results/weeklyTable/weekly.php

Google

ATLAS ▾ NICOS RTT FCT Tag BBC News Cars (2) ▾ Experiments ▾ Laboratories ▾ Mac (13) ▾ Misc (30) ▾ Online Accounts ▾ Technology (159) ▾ Science (11) ▾ Travel ▾

RTT

Draft agenda: ATLAS ...

Tier-0 Monitoring Ov...

Atlas Generators - Bu...

Swisscom - Residenti...

http://atlastagcollect...

HepMC - a C++ Event...

RTT performance over the past week

[Last update (CERN time): 09:20 @ 02 Jul 2008]

[Show All Reports](#)[Show All Results](#)

Release	Branch	Platform	Heirarchy	Started	Completed	Jobs OK	Done	Total	Pkgs: jobs OK	Report
Wednesday 02 July 2008										
rel_3	14.0.10.Y	i686-slc4-gcc34-opt	AtlasPoint1	08/07/02@03:00	08/07/02@05:33	3	4	4	59/60	---
---	14.1.0.Y	i686-slc4-gcc34-opt	AtlasProduction	---	---	---	---	---	---/---	---
---	bugfix	i686-slc4-gcc34-opt	AtlasHLT	---	---	---	---	---	---/---	---
rel_3	14.2.0.Y	i686-slc4-gcc34-opt	AtlasProduction	08/07/02@00:15	n/a	225	351	513	28/68	---
---	bugfix	i686-slc4-gcc34-opt	AtlasProduction	---	---	---	---	---	---/---	---
---	val	i686-slc4-gcc34-opt	AtlasProduction	---	---	---	---	---	---/---	---
rel_3	14.1.0.Y	i686-slc4-gcc34-opt	AtlasPoint1	08/07/02@00:35	08/07/02@05:46	1	3	3	61/62	---
Tuesday 01 July 2008										
rel_2	14.0.10.Y	i686-slc4-gcc34-opt	AtlasPoint1	08/07/01@03:00	08/07/01@05:52	2	4	4	59/60	---
---	14.1.0.Y	i686-slc4-gcc34-opt	AtlasProduction	---	---	---	---	---	---/---	---
rel_2	bugfix	i686-slc4-gcc34-opt	AtlasHLT	08/07/01@07:30	08/07/01@11:09	8	18	18	30/32	---
rel_2	14.2.0.Y	i686-slc4-gcc34-opt	AtlasProduction	08/07/01@00:15	08/07/01@16:46	431	513	513	32/68	---
rel_2	bugfix	i686-slc4-gcc34-opt	AtlasProduction	08/07/01@05:00	08/07/01@21:32	401	527	527	26/68	---
rel_2	val	i686-slc4-gcc34-opt	AtlasProduction	08/07/01@09:01	08/07/01@20:14	147	527	527	14/68	---
rel_2	14.1.0.Y	i686-slc4-gcc34-opt	AtlasPoint1	08/07/01@00:35	08/07/01@06:08	0	3	3	61/62	---
Monday 30 June 2008										
rel_1	14.0.10.Y	i686-slc4-gcc34-opt	AtlasPoint1	08/06/30@03:00	08/06/30@03:36	2	4	4	59/60	Show Report
---	14.1.0.Y	i686-slc4-gcc34-opt	AtlasProduction	---	---	---	---	---	---/---	---
rel_1	bugfix	i686-slc4-gcc34-opt	AtlasHLT	08/06/30@07:30	08/06/30@10:53	0	18	18	30/32	Show Report
rel_1	14.2.0.Y	i686-slc4-gcc34-opt	AtlasProduction	08/06/30@00:15	08/06/30@16:16	427	513	513	30/68	Show Report



Post-Deployment Validation

- Tier0
 - Repeat of Tier0 tests on Express Line events from installed release
 - Scale of ~100k events
- GRID production
 - Sample A production
 - ~200k events
 - Coupled to physics validation meetings every 2 weeks
- Sign-off prior to large scale production



Tier0 Bug Tracking

- Deal with initial turn-on problems
 - Unique period where software exposed to real physics events for first time
 - Anticipate the unexpected!
- Dedicated Savannah Project
 - Bug reports submitted by Tier0 shifters
 - Daily shift crew of experienced validators
 - Remove duplicate bugs
 - Assign to appropriate domain (e.g. Inner Detector, Reconstruction)
 - Check on progress with open bugs (and apply pressure)
 - Backup of on-call experts and "SWAT" team
 - Submit tags corresponding to closed bugs to AtlasPoint1 patch project
 - Check validation results
- 12-hour cycle of builds (daily & nightly)
 - Running Tier0 tests
- Daily sign-off meeting to decide on deployment of new patches