Automation of the SPI's External Software Website

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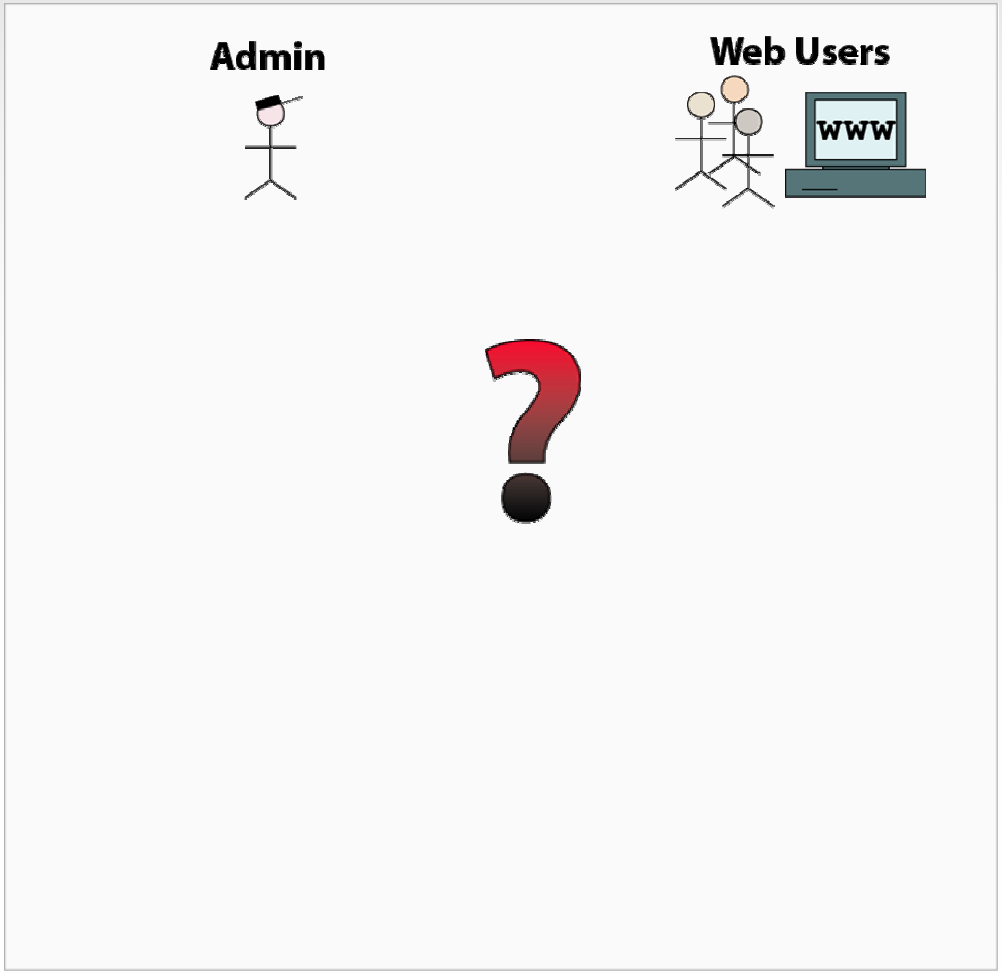
Context

- The Software Process & Infrastructure Project (SPI) provides software tools and libraries to the development projects of the LHC Computer Grid (LCG) Applications Area. The External Software website documents all external packages used for the LCG.
- The goal of this project is to automate this website to simplify updates by fetching information directly from AFS files and architecture. This will ensure consistency as packages are installed or modified.

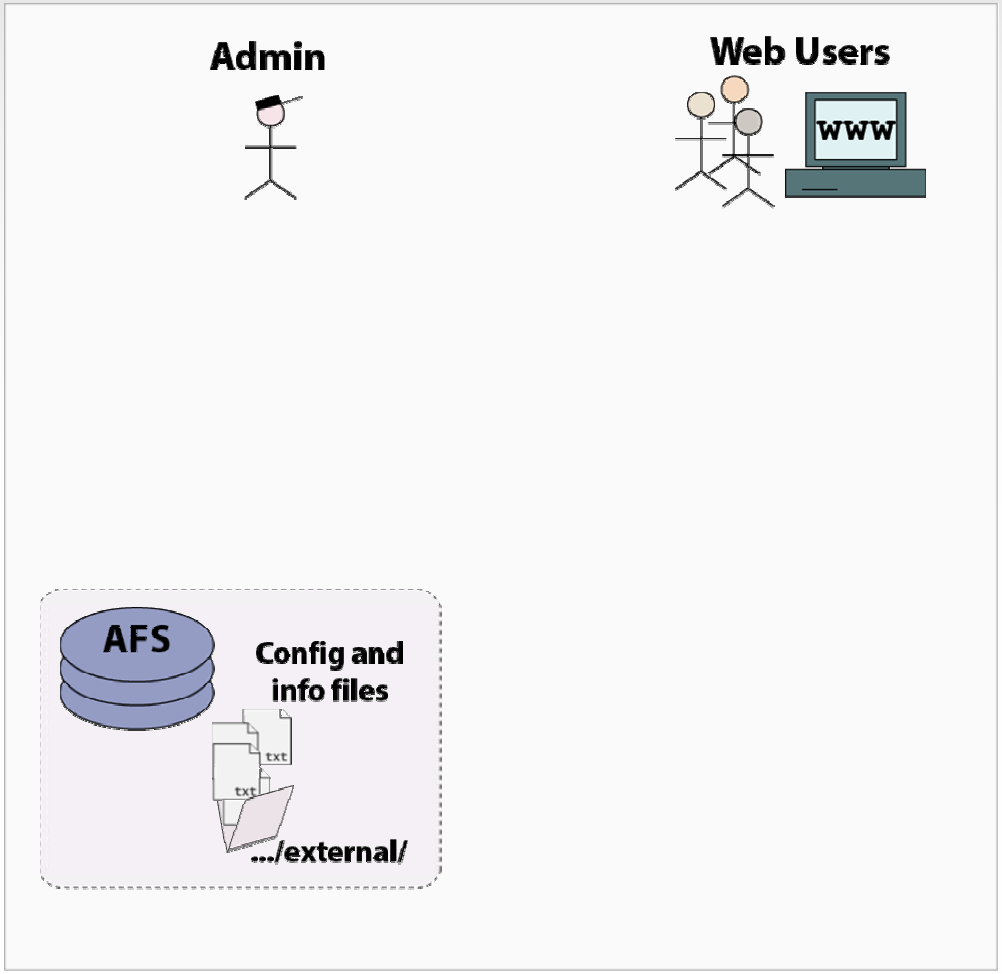
Automation

- About 50 packages are installed in AFS.
- For every package there are several versions.
- For every versions there is usually more than one platform.
- This makes more than 400 different installations!!!
- Admin needs to provide package information to the users in an automated way.



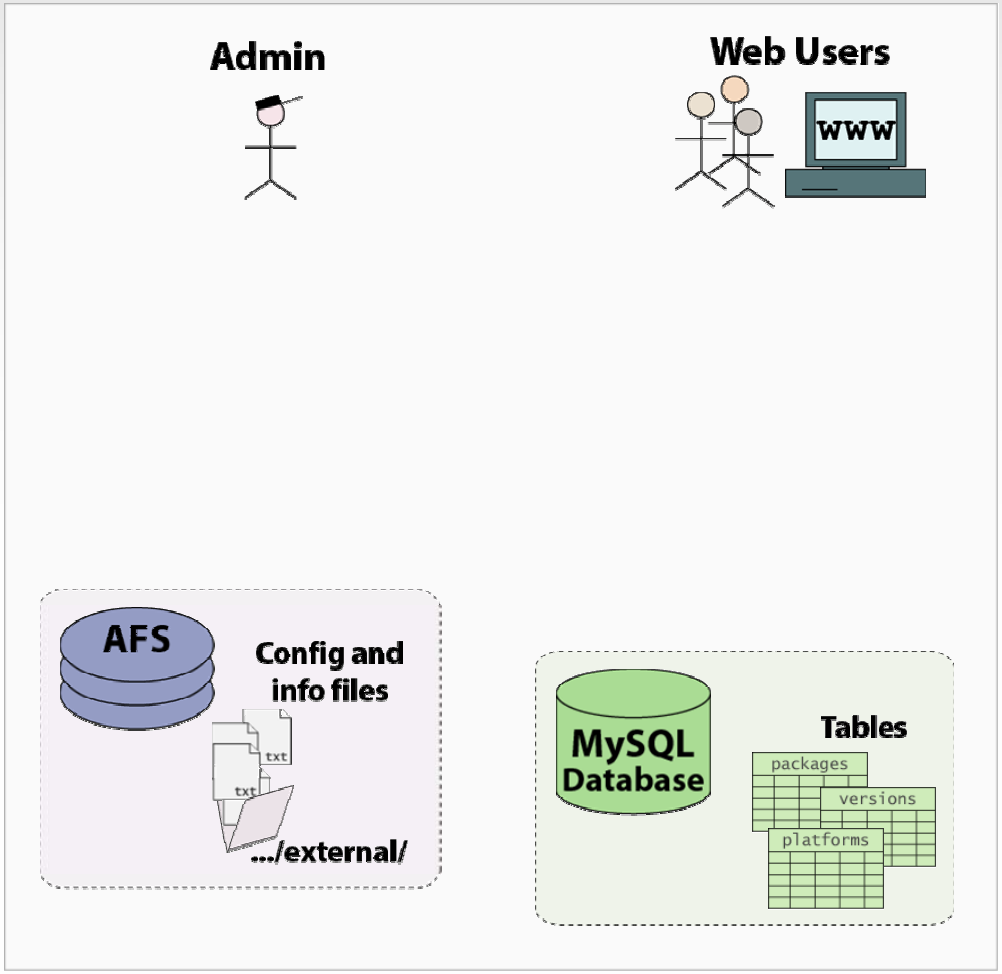
Automation: AFS structure and files

- All the information will come from AFS.
- Packages installed are located inside external/.
- Config and info files are located in special _SPI/ dirs.



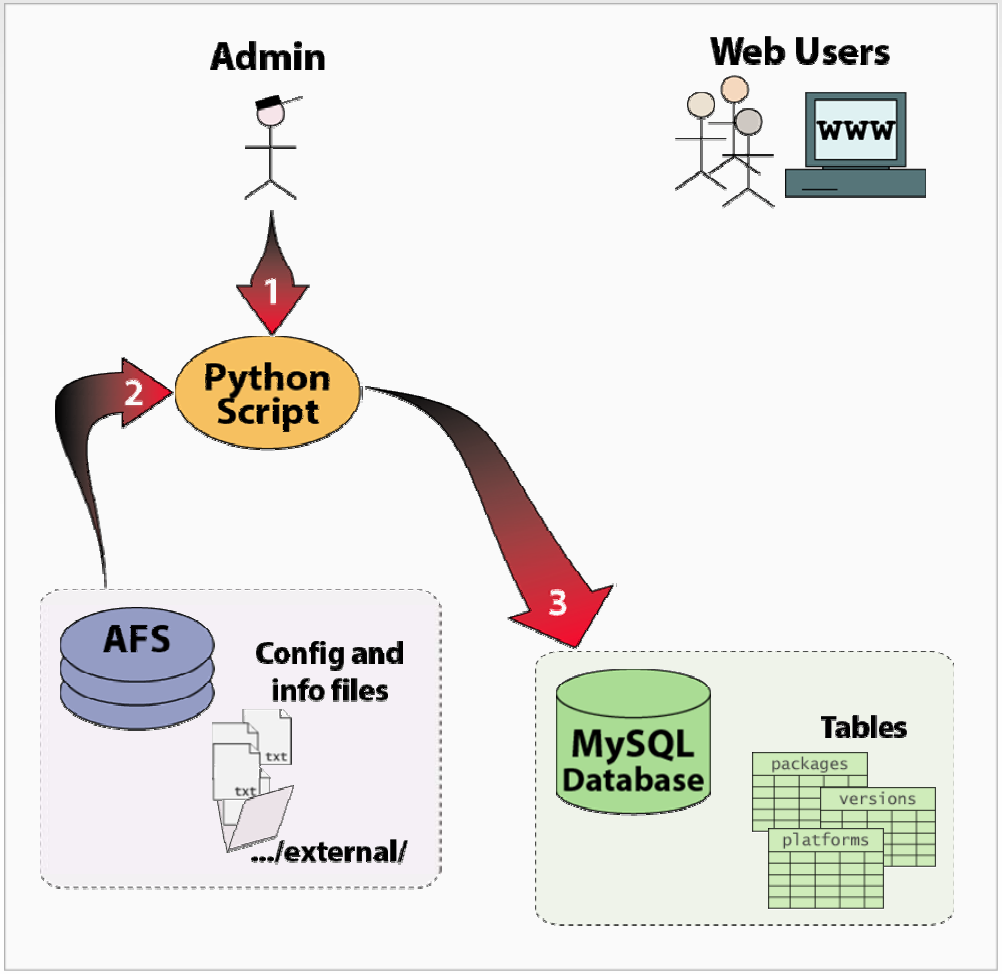
Automation: The MySQL Database

- Explore AFS once and stock information in a Database.
- Creation of three tables:
  - packages
  - versions
  - platforms



Automation: The Python Script

- How to extract information from AFS to MySQL?
- Using a Python Script.

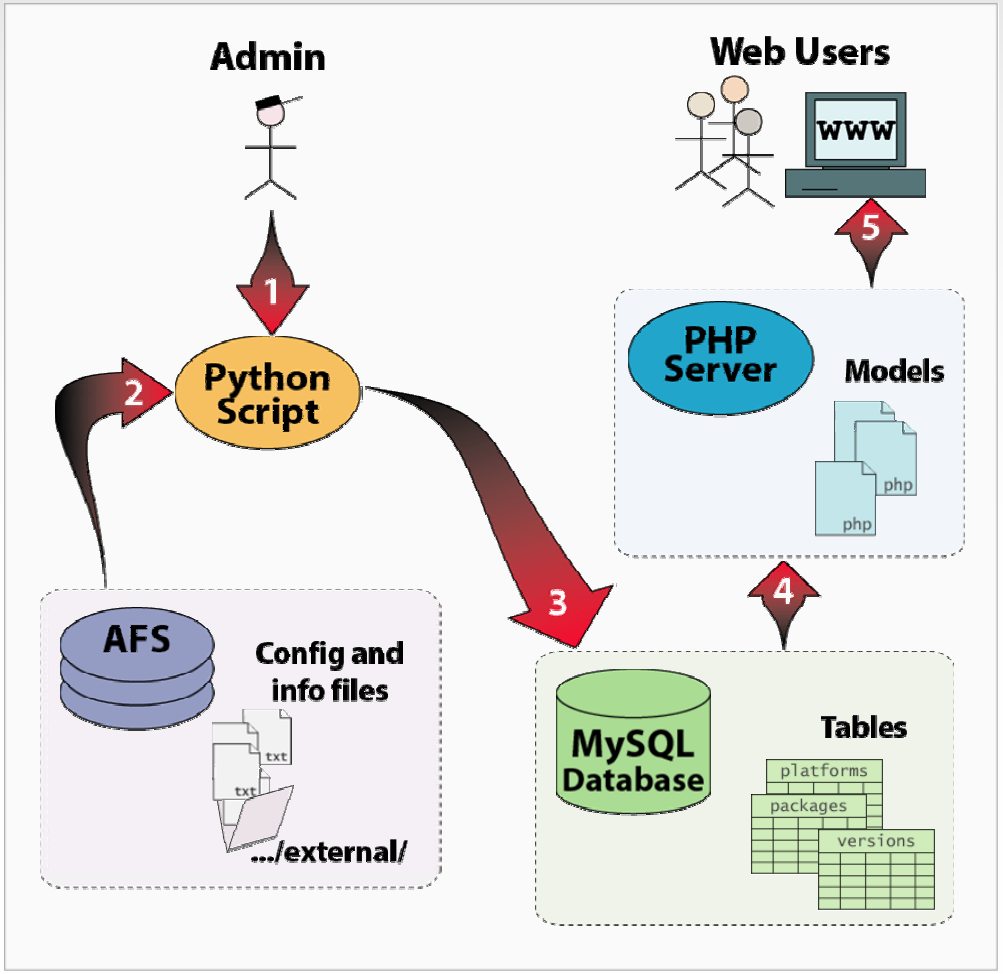


1. Admin launches the Script.
2. Python Script reads config files and explores external/ for installed packages.
3. Python Script updates the Database.

Automation: The PHP Server

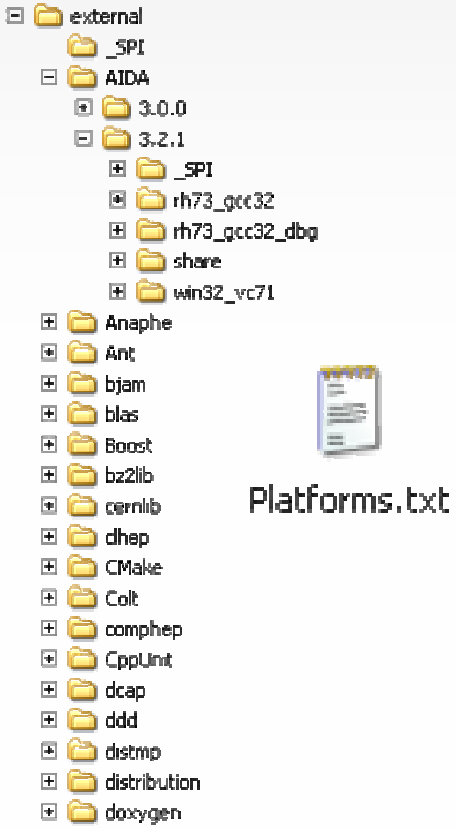
- Choose an easy way to automate the presentation of information in the Database.
- Base the dynamic pages on PHP models.

4. PHP Server retrieves information from the Database.
5. Models are applied and presented "on the fly".

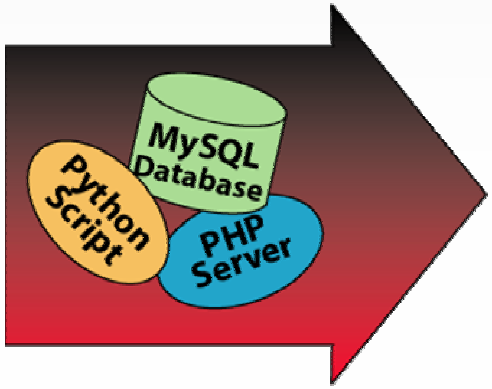


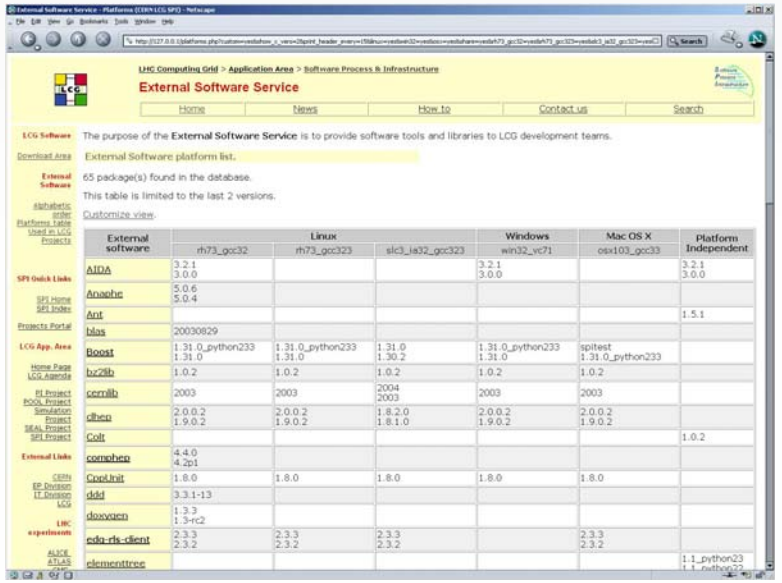
Results: http://spi.cern.ch/extsoft/

- One of the index pages:



Platforms.txt





External Software Service

LCG Software

Download Area

External Software

Alphabetic order
Platforms table
Used in LCG Projects

SPI Quick Links

SPI Home
SPI Index

Projects Portal

LCG App. Area

Home Page
LCG Agenda

PI Project
POOL Project
Simulation Project
SEAL Project
SPI Project

External Links

CERN
EP Division
IT Division
LCG

LHC experiments

ALICE
ATLAS

The purpose of the **External Software Service** is to provide software tools and libraries to LCG development teams.

External Software platform list.

65 package(s) found in the database.

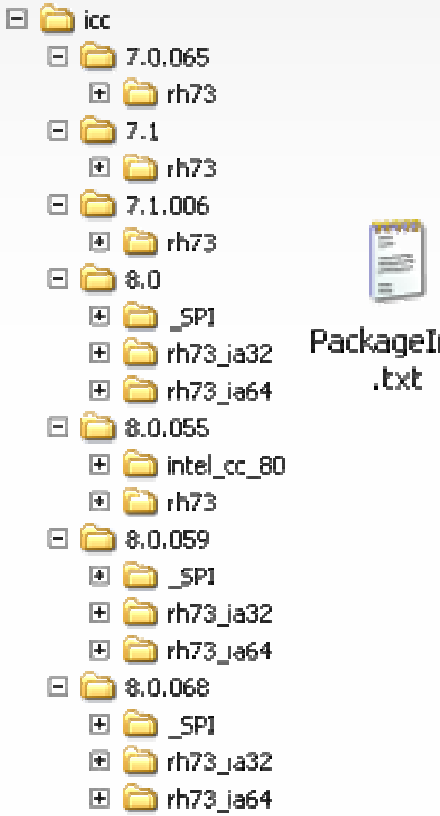
This table is limited to the last 2 versions.

Customize view.

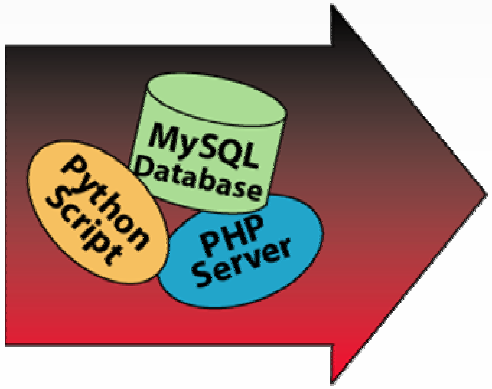
External software	Linux			Windows	Mac OS X	Platform Independent
	rh73_gcc32	rh73_gcc323	slc3_ia32_gcc323	win32_vc71	osx103_gcc33	
AIDA	3.2.1 3.0.0			3.2.1 3.0.0		3.2.1 3.0.0
Anaphe	5.0.6 5.0.4					
Ant						1.5.1
blas	20030829					
Boost	1.31.0_python233 1.31.0	1.31.0_python233 1.31.0	1.31.0 1.30.2	1.31.0_python233 1.31.0	spitest 1.31.0_python233	
bz2lib	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	
cernlib	2003	2003	2004 2003	2003	2003	
clhep	2.0.0.2 1.9.0.2	2.0.0.2 1.9.0.2	1.8.2.0 1.8.1.0	2.0.0.2 1.9.0.2	2.0.0.2 1.9.0.2	
Colt						1.0.2
comphep	4.4.0 4.2p1					
CppUnit	1.8.0	1.8.0	1.8.0	1.8.0	1.8.0	
ddd	3.3.1-13					
doxygen	1.3.3 1.3-rc2					
edg-rls-client	2.3.3 2.3.2	2.3.3 2.3.2	2.3.3 2.3.2		2.3.3 2.3.2	
elementtree						1.1_python23 1.1_python22

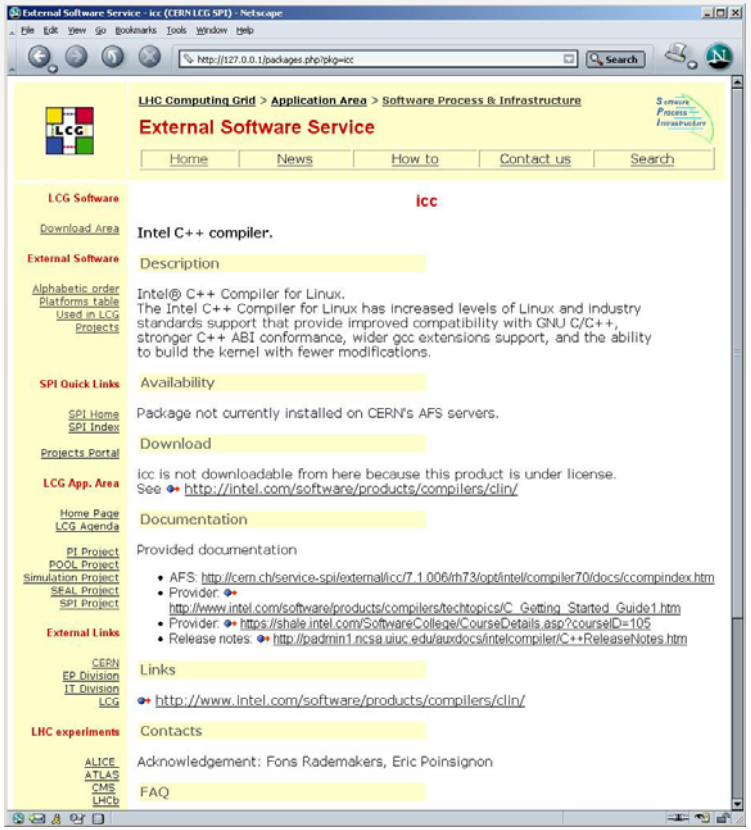
Results: http://spi.cern.ch/extsoft/

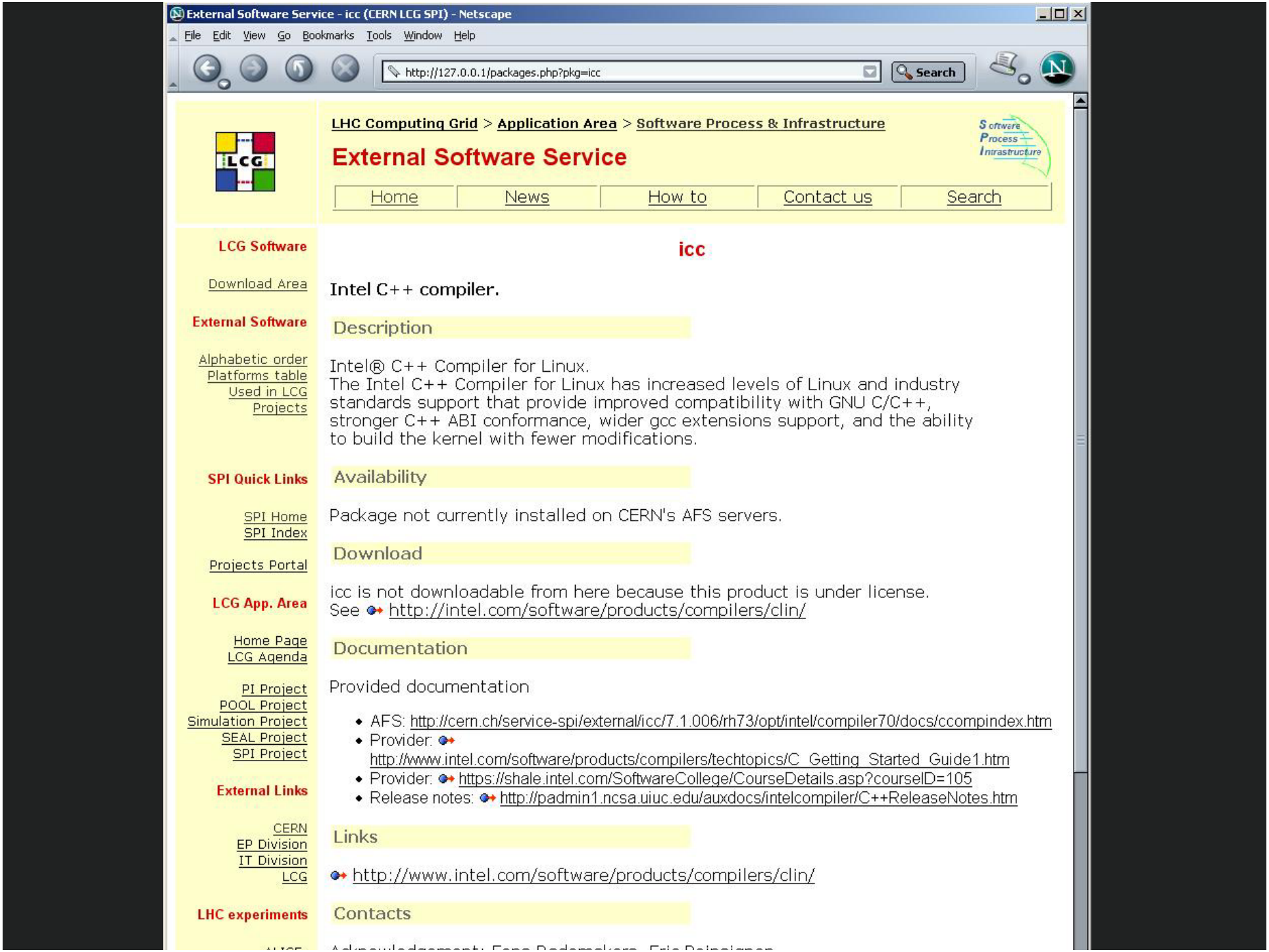
- A package description page:



PackageInfo .txt






External Software Service - icc (CERN LCG SPI) - Netscape
File Edit View Go Bookmarks Tools Window Help
http://127.0.0.1/packages.php?pkg=icc
Search
LHC Computing Grid > Application Area > Software Process & Infrastructure
External Software Service
Home
News
How to
Contact us
Search
LCG Software
Download Area
External Software
Alphabetic order
Platforms table
Used in LCG
Projects
SPI Quick Links
SPI Home
SPI Index
Projects Portal
LCG App. Area
Home Page
LCG Agenda
PI Project
POOL Project
Simulation Project
SEAL Project
SPI Project
External Links
CERN
EP Division
IT Division
LCG
LHC experiments
icc
Intel C++ compiler.
Description
Intel® C++ Compiler for Linux.
The Intel C++ Compiler for Linux has increased levels of Linux and industry standards support that provide improved compatibility with GNU C/C++, stronger C++ ABI conformance, wider gcc extensions support, and the ability to build the kernel with fewer modifications.
Availability
Package not currently installed on CERN's AFS servers.
Download
icc is not downloadable from here because this product is under license.
See http://intel.com/software/products/compilers/clin/
Documentation
Provided documentation
AFS: http://cern.ch/service-spi/external/icc/7.1.006/rh73/opt/intel/compiler70/docs/ccompindex.htm
Provider: http://www.intel.com/software/products/compilers/techtopics/C_Getting_Started_Guide1.htm
Provider: https://shale.intel.com/SoftwareCollege/CourseDetails.asp?courseID=105
Release notes: http://padmin1.ncsa.uiuc.edu/auxdocs/intelcompiler/C++ReleaseNotes.htm
Links
http://www.intel.com/software/products/compilers/clin/
Contacts

To Do...

- Fetch information from the existing static pages.
- Add new views.
- Move to the public server.