

CHEP 2013

Setting up collaborative tools for a 1000-member community



DIRK HOFFMANN, ADRIEN RIVIÈRE
CENTRE DE PHYSIQUE DES PARTICULES
DE MARSEILLE

TIZIANA ABEGG, OTMAR STAHL
LANDESSTERNWARTE HEIDELBERG

CÉCILE BARBIER

LABORATOIRE D'ANNECY-LE-VIEUX DE PHYSIQUE
DES PARTICULES



- **CTA Consortium**
- **InDiCo and Mailman**
- **Transition to LDAP**
- **SharePoint Portal**
 - Records Centre
 - Conferences and Publications
 - Connecting Unix and SharePoint
- **Lessons learned**

CTA Consortium

- Preparatory phase 2011-2013
- 1156 members and still growing
- 189 institutes in 28 countries
(less than 10 members on average per lab!)



InDiCo in CTA

Please note that the cta-info-list has been replaced. Check news for information. (Click [here](#) for help.)

INDICO
Integrated Digital Conference

The Indico tool allows you to manage complex conferences, workshops and meetings.

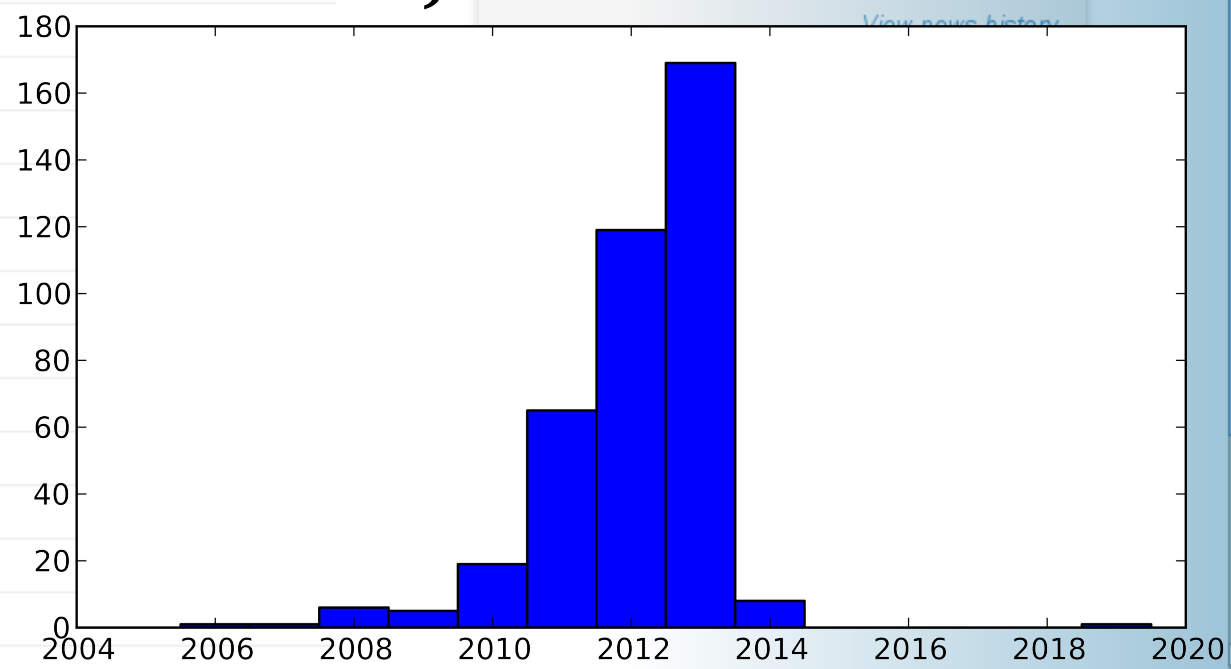
Europe/Berlin ▾ D. Hoffmann ▾

Home Create event ▾ Administration ▾ My profile Help ▾

- **First common tool installed after few years of exclusive use of MediaWiki for common docs**

- **User registry based on InDiCo, first contact for newcomers**

- **394 meetings in 42 categories**



- Main categories**
- Managers: Carr, J.; Lorenzen-Schmidt, H.; Abegg, T.
- Science / LINK 2 events (protected)
 - CTA Consortium General Meeting 16 events (protected)
 - CTA Consortium Board 11 events (protected)
 - CTA Executive Panel
 - Project Committee 35 events (protected)
 - Central Project Office
 - Reviews 16 events (protected)
 - Resource Board and AFAC 12 events (protected)
 - SAPO (speakers and publications office) 8 events (protected)
 - STAC Committee 2 events (protected)
 - SSC Committee 1 event (protected)
 - National meetings 1 event
 - External meetings of interest

- User registry de facto and in practice in InDiCo (Thank you!) – preliminary
- User database in SharePoint for reference
- Manual validation after crosscheck (or reminder), copy to LDAP
- Mailing lists in MailMan
- Group management in InDiCo, SharePoint, LDAP

Evolution:

- **Standard user – member, active**
“Just one password is enough.”

Evolution:

- **Standard user – member, active, with InDiCo/LDAP account for CTA resources**

Evolution:

- **Standard user – member, active, with InDiCo/LDAP account for CTA resources**
- **External “contacts” – vendors, representatives, need to be informed**

Evolution:

- **Standard user – member, active, with InDiCo/LDAP account for CTA resources**
- **External “contacts” – vendors, representatives, need to be informed**
- **“Address-only” users – member, but no account**

Evolution:

- **Standard user – member, active, with InDiCo/LDAP account for CTA resources**
- **External “contacts” – vendors, representatives, need to be informed**
- **“Address-only” users – member, but no account**
- **External reviewers – need access to *some* CTA resources**

- **Many historical “groups” and “lists”**
- **Concept of unification (“e-groups”) not yet common**
- **Concept (under construction):**
 - SharePoint master (in principle)
 - Request membership, Owner group, global visibility of contents
 - Copy to LDAP (cronjob)
 - Distribution to all instances
- **Migration from MailMan is painful (addresses only)**

- **LDAP contains**

- Users
- Groups

- **LDAP directory used directly by**

- SharePoint
- MediaWiki
- InDiCo (validated, switchover soon)
- Redmine
- InSilicoLab (Cyfronet)

- indirectly
 - SVN

LDAP & Web Registry

- **LDAP is a robust, secure and universal tool ...
once you understood how to configure it.**
- **Widespread use, compatible, interoperable.
Can bridge between Windows and Linux!**
- **But no convenient FLOSS UI available !???
(InDiCo can play that role, for a while.)**
- ➔ **Decided to build our own registry interface**

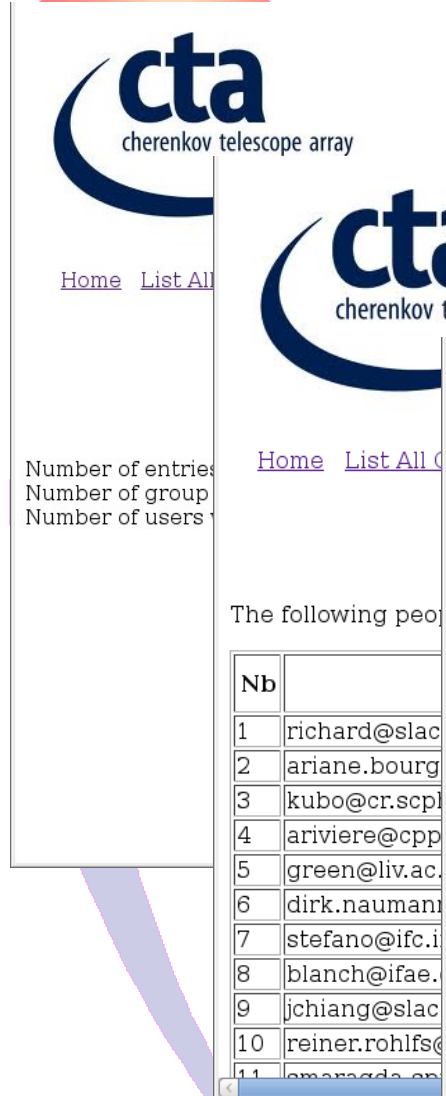
Web Registry (1)

- Examples from Registry UI (admin)

- Home

- List of users, modify, create, delete

- Groups



cta
cherenkov telescope array

[Home](#) [List All](#)

Number of entries
Number of group
Number of users

[Home](#) [List All](#)

The following people

Nb	
1	richard@slac
2	ariane.bourg
3	kubo@cr.scpl
4	ariviere@cpp
5	green@liv.ac.
6	dirk.nauman
7	stefano@ifc.i
8	blanch@ifae.
9	jchiang@slac
10	reiner.rohlfs
11	emargada@on

[Home](#) [List All CTA_Members](#) [Add User to CTA_Members](#) [Search user](#) [Validate user](#) [CTA Group](#) [Pwd Reset](#) [MailMan](#) [Logout](#)

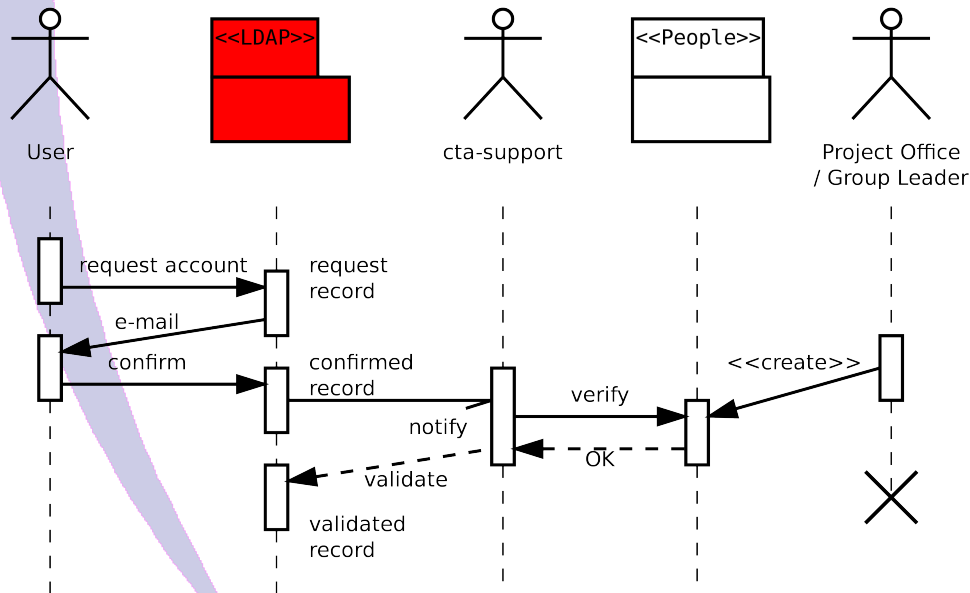
[Add new Group](#)

The following group are in the directory :


Nb	Group	Description	Edit	Delete
0	cta-members	Group of all registered CTA members	Edit cta-members	Delete
1	cta-support	CTA support group (web services, help desk)	Edit cta-support	Delete
2	cta-cb	CB Members: Party representatives	Edit cta-cb	Delete
3	cta-wp-dm	DATA Work Package members	Edit cta-wp-dm	Delete
4	sapo	Speakers And Publications Office (SAPO) group	Edit sapo	Delete
5	cta-nl	Dutch CTA mail exchange	Edit cta-nl	Delete
6	subcontractors	Subcontractors of CTA, who are not CTA-members	Edit subcontractors	Delete
7	template	Template for new CTA-Groups.	Edit template	Delete


Web Registry (2)

- Examples from Registry UI (user)
 - Request account / validate
Delegate validation to group leaders
 - Password “self service”





Self service password





 Ihr Login wird benötigt

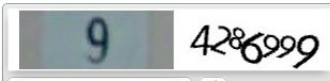
Um ein neues Passwort festzulegen müssen Sie zuerst Ihr Altes eingeben.
 Forgot your password?
 • Reset your password with a mail challenge

Login 

Altes Passwort 

Neues Passwort 

Bestätigen 



Geben Sie die 2 Wörter ein

- **Microsoft product (“eek!”)**
- **Integration with MS Office suite**
- **Compatibility with non-MS browsers since SP2010**
- **Development possible in C#, .net, ASP, XSLT, ...**
- **Strategic decision in CNRS and CTA to use SP2010**
- **Hosted “in the cloud” (company close to Angers)**
- **First, use applications out of the box**
- **Some CTA specific developments**



ShPt: What was not OOB

- **Heavy weight**

- Records Centre
- SAPO
- Yet another documentation system
- Requirements

- **Light weight**

- Specific views with XSLT

- **Tricky**

- SOAP and REST interface through HTTP/cURL

Records Centre

- First “development” for CTA
 - Help from external consultant (10h)
 - Flat learning curve
- Luckily, physicists have a high level of frustration tolerance.
- Implements CTA documentation plan.
 - 265 document nodes today

The screenshot shows a web browser window displaying the CTA Records Centre. The browser address bar shows the URL: <https://portal.cta-observatory.org/RecordsCentre/SitePages/Home.aspx>. The page title is "Records Centre > Home".

The main content area features a "Welcome to the Records Centre" message, stating that the site provides access to the Archives library for useful documents. It includes a "View lists of documents in the Records Centre" button and an "Upload a document to the Records Centre" button.

Below the welcome message, there are search options: "Search for a document only in the Records Centre (Local Search)" and "Search for a document anywhere on Sharepoint site (Global search)".

On the right side, there is a table titled "10 latest submissions (click here for all)".

Type	Title	REF	Created
	CCF Equipment at Temperatures below -20° C	COM-CCF/131009	14/10/2013 08:16
	Minutes of the Project Committee Meeting held on 15/16 July 2013	MAN-PO/130732	11/10/2013 11:31
	CTA Resource Board Delegates	MAN-ADMIN/130514	07/10/2013 13:10
	SST 1M Structure Analysis	MAN-PO/130923	30/09/2013 12:46
	LST Structure Analysis	MAN-PO/130922	30/09/2013 12:44
	Minutes of Project Committee Meeting held on 17/18 June 2013	MAN-PO/130628	30/09/2013 11:49
	Minor Coating Degradation at Proposed CTA Sites	INFA-SITE/130905	17/09/2013 14:55
	ATMOSCOPE - SENES Comparison	INFRA-SITE/130906	08/09/2013 07:38
	Specification of Lasers used for the Cherenkov Telescope Array	COM-CCF/130823	04/09/2013 21:08
	Science Requirements for CTA	SCI-LINK/121120	01/09/2013 07:39

- **With conferences**
 - Submit conference – contribution – abstract, talk/poster, proceedings
 - Refereeing and discussions
 - *Still with help from consultant*
- **Without conferences (being adapted)**
 - Submit
 - Refereeing and discussions
 - *Development completely in-house (CPPM)*



Speaker's And Publication Office (SAPO)

The Speaker's And Publication Office (SAPO) is responsible for reviewing all CTA publications and contributions to conferences (i.e. abstracts, talks and proceedings). All CTA Members submitting conference abstracts, giving conference talks or writing papers/proceedings on CTA related topics are responsible for submitting their contributions to the relevant Work Package and then to SAPO ahead of time.



Rules and Organisation

Click on one of the following items.

- SAPO mission statement (SAPO's role, tasks, etc.)
- General CTA Publication Guidelines (Deadlines, Authorlist, and Acknowledgements)
- Detailed Rules for CTA Publications and Conference Contributions
- Templates for Talks and Posters
- Membership of SAPO
- E-Mail to Chair Rene Ong
- E-Mail to whole SAPO group



Documentation and Instructions

Click on one of the following items.

- Create a conference
- Submit your contribution
- Submit a document to your contribution

Conferences in the SAPO database

Next 10 conferences (click here for all)

CONFERENCE TITLE	CONF. LOCATION	START DATE	END DATE
CHEP 2013	Amsterdam	14/10/2013	18/10/2013
IEEE NSS	Seoul, South Korea	27/10/2013	02/11/2013
Violent Universe	London	31/10/2013	01/11/2013
LARM 2013	Florianópolis, Brazil	25/11/2013	30/11/2013
RICH2013	Japan	01/12/2013	06/12/2013

[Add new item](#)

More list views of Conferences

- By years: 2010 2011 2012 2013
- All past conferences — All upcoming conferences
- All conferences with CTA contributions

Various Libraries (file storage) and wiki-like pages

ACTL WP: Instrument Control and Operation

The task of the ACTL work package is described in the CTA preparatory phase application:

"Instrument control and data acquisition The CTA instrument will have to deal with a larger variety of observation modes than current instruments and will operate with a high efficiency in an automatic mode. This requires a well designed, failure-obviant system integrating both an automatic control layer and a software layer for the control and operation of the system. The design and implementation of the software layer needed to operate CTA is the task of the ACTL work package. All software applications will be based on a common software system providing a well-structured platform that embeds standard design patterns and avoids duplication of efforts. The development and maintenance of applications ranging from the control of the different hardware components of single telescopes to the full operation of the observatory will be simplified. Evaluation of existing common software systems and the development of first test applications have already started."

Discussions of ACTL requirements are being carried out via the Redmine ticket system. To read and participate on the discussions, follow the instructions below to access to the Redmine system.

For access requests (internal) on this site, you need to be a member of the ACTL Members group. If this happens not to be the case (yet), then please contact any member of the ACTL Owners group! You can set up special permissions for the documents and contents that you submit here. By default, everything is readable by all authenticated CTA Members and not for (anonymous) public users.

Type	Name	Modified	Modified By	Open Menu	Checked-Out To
File	Home	16-10-2013 19:06	Dirk Hoffmann		Dirk Hoffmann
File	GPU	17-07-2013 13:19	Dirk Hoffmann		
File	OPC-UA Documentation	25-08-2013 07:46	Dirk Hoffmann		
File	Redmine	14-08-2013 14:00	Cécile Barber		
File	Feedback for Requirements	06-05-2013 13:46	Dirk Hoffmann		

Work Package Coordinator
Peter Wegner
Peter.Wegner@DESY.De

Sub-projects - coordinators
Instrument Monitoring Software - Gero Tost
Instrument Slow Control Software - Thierry Le Flour
Instrument Operation Software - Igor Oya
Data Acquisition Software - Françoise Lourd

CTA Data Management project

The CTA Data Management (DATA) project is in charge to develop the services and infrastructures needed to handle the large amount of data generated by the CTA observatory. It must also implement them and provide modern and efficient data access at all levels. More specifically, the DATA project covers a series of issues:

- 1) Designing the CTA observatory research IC-based infrastructures for efficient and high performance data management and data archives based on modern e-infrastructures (e.g. EGI-GRID, GEANT and Euro-VO).
- 2) Developing the Science User Gateway including User-Configured Tools for Access to computing resources, tools for data access, data processing, and data analysis.
- 3) Developing the implementation plans for the offline CTA e-infrastructure (including the CTA Data Centre).
- 4) Defining and implementing data formats, data archives, and analysis tools to guarantee the efficient analysis.
- 5) Defining the specifications of a common data format needed for the interoperable usage of CTA data together with other data from high energy astronomy data centers resulting in an extended hierarchical data format.

News and announcement

- > New Software Requirements Documents, new V&V and costs spreadsheet in "DATA local library"
- > New contribution (V2) of the DATA project to the CTA preliminary TDR available in "DATA local library".
- > Final report from DANTE about Network from CTA candidate sites available in "DATA local library"

New Data Model Page (June 21st, 2013)

Work package coordinators:
Giovanni Lamanna
LAPP, Laboratoire d'Astrophysique des Vieux de Physique des Particules
9 Chemin de Bellevue, BP 110
78941 Annecy-le-Vieux CEDEX - FRANCE
+33 4 50 09 16 79

Working Groups - Home Working Groups

The CTA design study is structured into work packages:

- ACTL:** Array control (Coordinator: Christian Stegmann)
- ATAC:** Schemes to calibrate the state of the atmosphere and of the instrument (Coordinator: Georges Vasilestiadis)
- COM:** Common Test Facilities and Components (Coordinator: Andreas Foerster)
- DATA:** CTA Computing and E-infrastructures for data management (Coordinator: Giovanni Lamanna)
- GOV++:** Government (Coordinator: Stefan Wagner)
- IRB:** Industrial R&D Operations (Coordinator: Mathieu de Naurois)
- LST:** Large Size Telescopes (Coordinator: Masahiro Teshima)
- MC:** Optimization of array layout, performance studies and analysis algorithms (Coordinator: Jim Hinton)
- MST:** Middle Size Telescopes (Coordinator: Stefan Schlenstedt)
- OUTREACH:** (Coordinator: Aimo Silenpää)
- PHYS /LINK:** Astrophysics and astroparticle physics (Coordinator: Diego Torres)
- QA:** Quality assurance
- SCT:** Schwarzschild-Couder Telescope (Coordinator: Vladimir Vassilev)
- SDEV:** Site development (Coordinator: Felix Mirabel)
- SITE:** Site selection (Coordinator: Tomasz Bulik)
- SST:** Small Size Telescopes (Coordinator: Tim Greenshaw)
- TEL:** Telescope structures (Coordinator: Michael Parter)

CTA Working groups

Welcome to the NectarCAM Site

NECTARcam is a camera designed to be operated on the Medium Size Telescopes of CTA.

Latest Pictures (click here for all)

NectarCAM logs chosen on March 29th, 2013

nectarcam-logs-prog1.jpg

Latest modified documents (click here for all)

- Preliminary Technical Design Report
- HVPA Development Plan
- HVPA Development Plan
- LFPHM Management
- EMC/EMI GUIDELINES FOR NECTARcam EXPERIMENT
- Ray tracing for NectarCAM/MST
- Electronic Reliability Guidelines
- NectarCAM Budgets

Links

- MeCTA/CamMeetings in CTA WGCo since the 29th August 2012
- MeCTA/CamMeetings in WGCo before the 29th August 2012
- New electronics for the Cherenkov Telescope Array (NECTARcam) M&A (2011)
- CTA/NECTARcam-Logbook archives

NectarCAM meetings in CoCa WG (click here for all)

- NECTARCAM DAO (PMS)
- 2013-10-09 - 2013-10-09
- NECTARCAM P2F-meeting (CCUB, Physics Faculty, UB)
- 2013-09-17 - 2013-09-19
- Trigger Working Group Meeting (See Vogh meeting)
- 2013-07-26 - 2013-07-26
- SPH Advanced Workshop (Max-Planck-Institute for Physics, Munich)

Requirements

- **Inventory of 562 requirements for CTA project, specifications are derived from those.**
- **Requirement change requests workflow**

Requirements

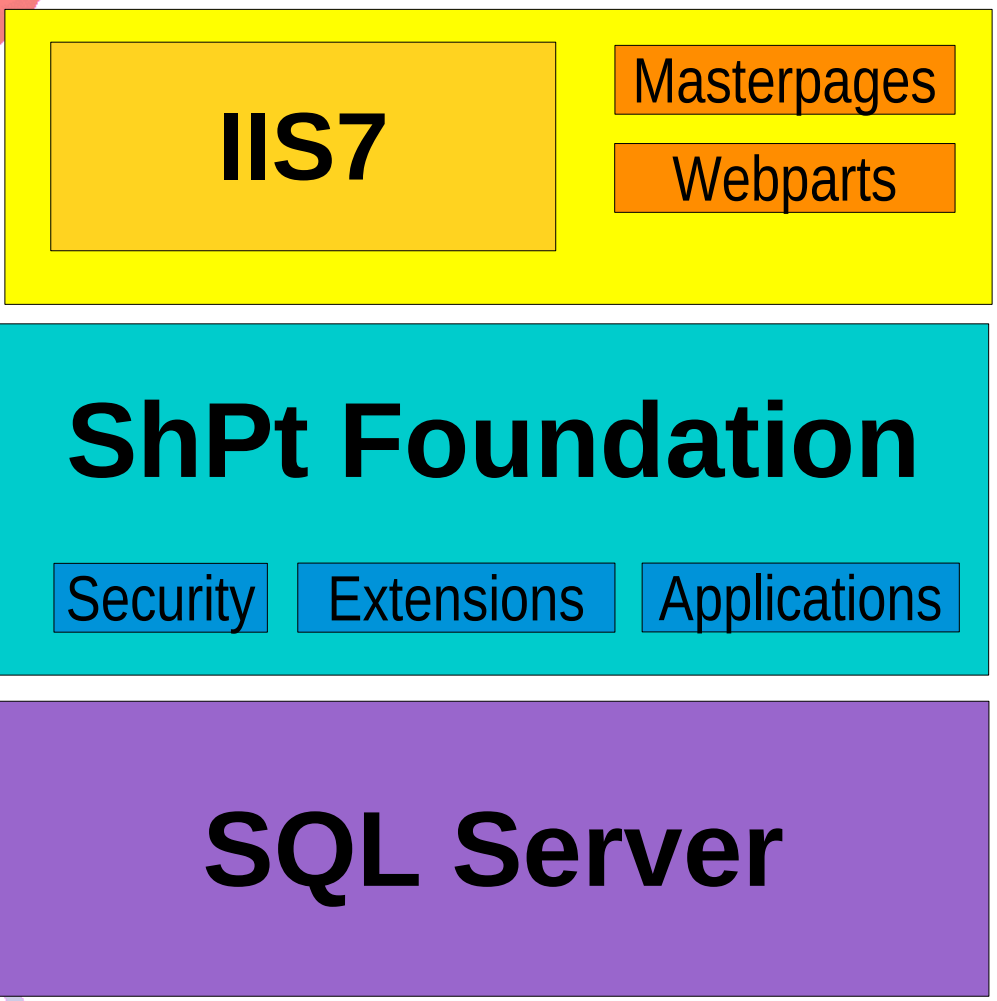
■ Invent specific Requirements

Requirement Change and Approval Site

This is the central management site for CTA level A and level B requirements.

Req-ID	Class	Title	Value	Units	Approval status
Cat: TCTA (11)					
Cat: TSCI (19)					
SCI010	R	Differential sensitivity at 50 GeV			
SCI020	R	Differential sensitivity at 1 TeV			
SCI030	R	Differential sensitivity at 50 TeV			
SCI040	R	Short-timescale sensitivity at 50 GeV			
SCI050	R	Short-timescale sensitivity at 1 TeV			
SCI060	R	Short-timescale sensitivity at 50 TeV			
SCI070	R	Angular resolution			
SCI080	R	Energy resolution			
SCI090	R	Field of view			
SCI100	R	Source localisation			
SCI110	R	Repointing time			
SCI120	R	Maximise availability			
SCI130	R	Full sky access			
SCI140	G	Mid-energy range extension			
SCI150	R	Prompt analysis and dynamic rescheduling			
SCI160	R	Access to CTA data			
SCI170	R	Energy scale uncertainty			
SCI180	R	Photon arrival time accuracy			
SCI190	R	Flexibility of operation			
Cat: A-ENV (46)					
Cat: A-GOV (40)					
Cat: A-PERF (72)					

ShPt: What you can do (or not)



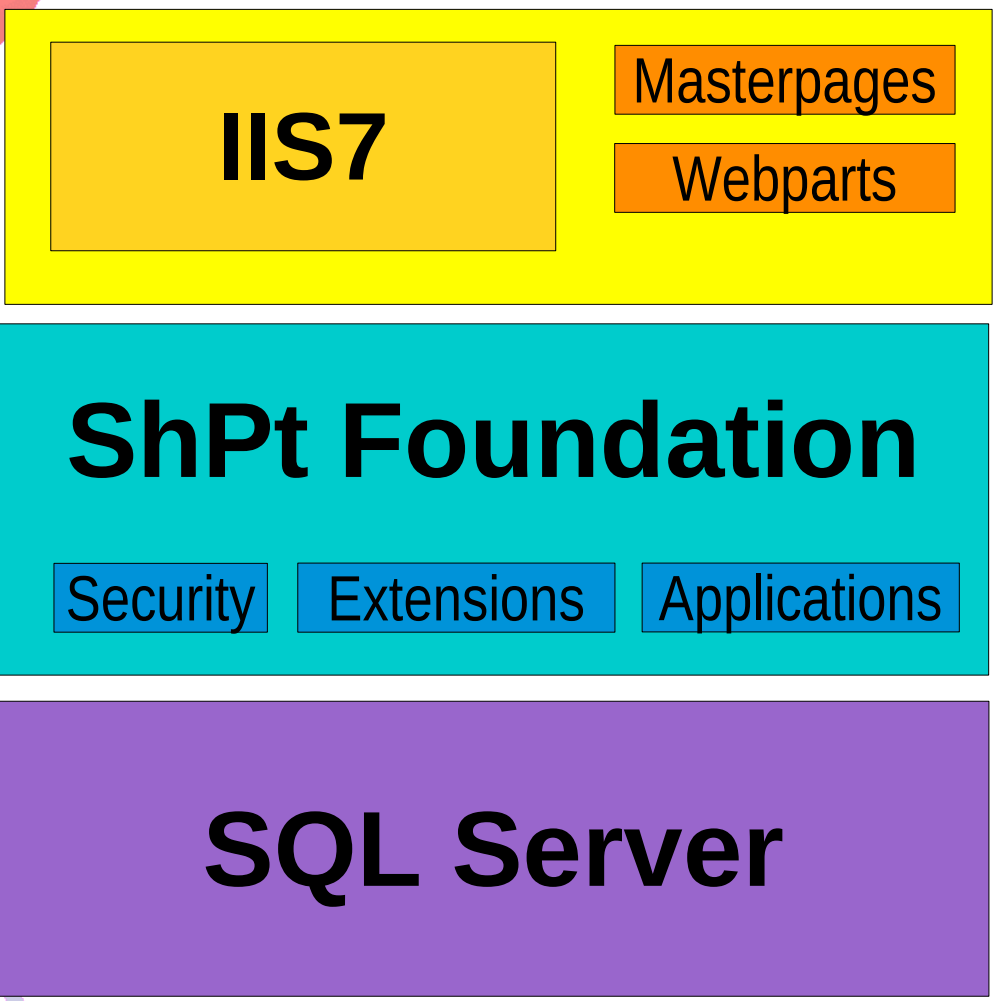
■ Access

- HTTP
- XML/HTML
- Wiki, WebApp
- ShPt Designer

- ASP.NET
- Visual Studio

- SysAdmin

ShPt: What you can do (or not)



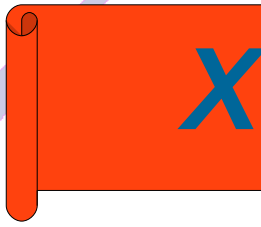
■ Access

- HTTP
- XML/HTML
- Wiki, WebApp
- ShPt Designer
- ~~■ ASP.NET~~
- ~~■ Visual Studio~~
- ~~■ SysAdmin~~

XSLT transformations

- The point will be to create your own query/view
- Learn CAML

```
<Query>
  <ViewFields>
    <FieldRef Name="First_x0020_Name"/>
    <FieldRef Name="Last_x0020_Name"/>
    <FieldRef Name="email"/>
    <FieldRef Name="User"/>
    <FieldRef Name="User_Email"/>
  </ViewFields>
  <Joins>
    <Join Type="LEFT" ListAlias="Users">
      <Eq>
        <FieldRef Name="User" RefType="Id"/>
        <FieldRef List="Users" Name="ID"/>
      </Eq>
    </Join>
  </Joins>
  <OrderBy>
    <FieldRef Name="Last_x0020_Name"/>
    <FieldRef Name="First_x0020_Name"/>
  </OrderBy>
  <Where>
    <Or>
      <Gt>
        <FieldRef Name="active_x0020_stop"/>
        <Value Type="DateTime"><Today OffsetDays="-365"/></Value>
      </Gt>
      <IsNull>
        <FieldRef Name="active_x0020_stop"/>
      </IsNull>
    </Or>
  </Where>
</Query>
```



- The point will be to have your own query/viewer
- Learn CAML
- Learn XML

```
<dsQueryResponse ViewStyleID="" BaseViewID="1" TemplateType="100" RowLimit="30">
<Rows>
<Row ID="1"
  PermMask="0x7fffffffffffffff"
  Attachments="0"
  Title="Theories of Truth"
  FileLeafRef="1_.000"
  FileLeafRef.Name="1_"
  FileLeafRef.Suffix="000"
  FSObjType="0"
  Created_x0020_Date="0;#2010-03-01 13:16:03"
  Created_x0020_Date.ifnew attribute value:
  FileRef="/sites/Contoso/Lists/Books/1_.000"
  FileRef.urlencode="%2Fsites%2FContoso%2FLists%2FBooks%2F1%5F%2E000"
  FileRef.urlencodeasurl="/sites/Contoso/Lists/Books/1_.000"
  File_x0020_Type=""
  HTML_x0020_File_x0020_Type.File_x0020_Type.mapall="icgen.gif||"
  HTML_x0020_File_x0020_Type.File_x0020_Type.mapico="icgen.gif"
  ContentTypeId="0x0100CFB65A47C9E37B4A818F75CB08CF4062"
  ISBN="0-262-61107-4"
  ContentType="Item"
  Author='<span class="ms-imnSpan">
    <a href="javascript:;" onclick="IMNImageOnClick(event);return false;" class="ms-imnlin
    </a>
    <a onclick="GoToLink(this);return false;" href="/sites/Contoso/_layouts/userdisp.aspx?
    Michiyo Sato</a></span>'
  Author.id="1"
  Author.title="Michiyo Sato"
  Author.span='<nobr><span>
    <a onclick="GoToLink(this);return false;"
      href="/sites/Contoso/_layouts/userdisp.aspx?ID=1">Michiyo Sato</a>
    
    <a href="javascript:;" onclick="IMNImageOnClick(event);return false;" class="ms-imnlin
      
    </a>
  </span></nobr>'
  Retail_x0020_Price="$37.99"
  Retail_x0020_Price.="37.99000000000000" />
<Row ... attributes omitted ... />
<Row ... attributes omitted ... />

<!-- Up to 30 Row elements total per page. -->

<Row ... attributes omitted ... />
</Rows>
</dsQueryResponse>
```

- The point will come where you want to design your own query/view
- Learn CAML
- Learn XML
- Learn XSLT

```
<xsl:template
  name="FieldRef_Text_body.email"
  ddwrt:dvt_mode="body"
  match ="FieldRef[@Name='email']"
  mode="Text_body"
  ddwrt:ghost=""
  xmlns:ddwrt2="urn:frontpage:internal">
<xsl:param name="thisNode" select="."/>
<xsl:choose>
<xsl:when
  test="translate(normalize-space(substring-before(substring-after($thisNode,
    'ABCDEFGHIJKLMNOPQRSTUVWXYZ','abcdefghijklmnopqrstuvwxyz')
    != normalize-space($thisNode/@User_Email)
    and $thisNode/@User.id > 0)">
  <a>
  <xsl:attribute name="href">
    <xsl:text>mailto:</xsl:text>
    <xsl:value-of select="$thisNode/@User_Email" disable-output-escaping="yes" />
  </xsl:attribute>
  <xsl:value-of select="$thisNode/@User_Email" disable-output-escaping="yes" />
  </a>*
</xsl:when>
<xsl:otherwise>
  <xsl:value-of select="$thisNode/@email" disable-output-escaping="yes" />
</xsl:otherwise>
</xsl:choose>
</xsl:template>
```

XSLT transformations

- The point is to have your own queries
- Learn C
- Learn XSLT
- Learn XSL
- Done.

Experts Corner > Tasks

Use the Tasks list to keep track of work that you or your team needs to complete.

Internal
Consortium Bodies
Working Groups
Lists
Helpdesk
Search

CTA-Observatory

InDiCo Agenda

Records Centre

SAPO

Requirements

WPC Wiki

Experts' Corner

Libraries

Site Pages [helpdesk]

Site Pages [experts]

Shared Documents

GoogleAnalyticsReports

DSI mailbox

Lists

Tasks

Links

Expert Meetings

PostMigrationChecklist

AuditMigration

CTA-Support Calendar

Discussions

Team discussion

cta-support

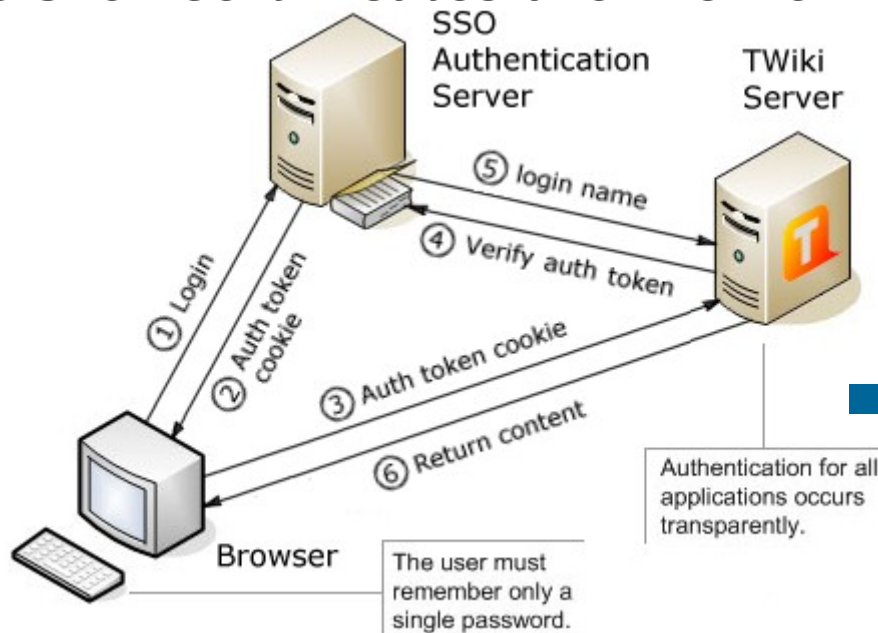
Discussion tests

+ Add new item - Show "All Tasks" view

<input type="checkbox"/>	ID	Edit	Title	Assigned To	Status	PRIO	Due Date	% Complete	Predecessors
<input type="checkbox"/>	352		Correct FTE display	Adrian Riviere Dirk Hoffmann Jürgen Ködderitzsch	In Progress	10	27/09/2013	1 %	
<input type="checkbox"/>	357		Comment on "Unknown addresses"	Tiziana Allogg	Not Started	10	18/10/2013		
<input type="checkbox"/>	277		SAPO version publications	Adrian Riviere Dirk Hoffmann Wera Ong	In Progress	9	01/11/2013	10 %	Acceptance/requirements/change management
<input type="checkbox"/>	343		Feedback on registry tools	Tiziana Allogg Dirk Hoffmann Cecile Badier Oliver Stahl	In Progress	9	04/10/2013	40 %	
<input type="checkbox"/>	347		Repair address "in undeclared" option		Not Started	9	13/09/2013		
<input type="checkbox"/>	359		Delete also registered from SAPO	Adrian Riviere Dirk Hoffmann	Not Started	9	31/10/2013		
<input type="checkbox"/>	218		Tutorial How to Upload	Adrian Riviere Tiziana Allogg	In Progress	8	09/09/2013	90 %	
<input type="checkbox"/>	255		Check access to CERN computing facilities	Tiziana Allogg Dirk Hoffmann	In Progress	8	12/10/2012	50 %	
<input type="checkbox"/>	354		Button for "unsubscribe all members" of a given mailing list	Adrian Riviere	Not Started	8	04/10/2013		
<input type="checkbox"/>	356		Big correction in Requirements website	Adrian Riviere Manoel André Bevil	Not Started	8	11/10/2013		
<input type="checkbox"/>	358		Update change of Documentation	Tiziana Allogg	Not Started	8	29/11/2013		
<input type="checkbox"/>	337		Category for "ML meetings" in InDiCo	Tiziana Allogg	In Progress	7	30/08/2013	92 %	Feedback on "wrong" mailman addresses
<input type="checkbox"/>	340		Feedback on "wrong" mailman addresses	Cecile Badier Tiziana Allogg	In Progress	7	30/09/2013	20 %	
<input type="checkbox"/>	344		Automatic InDiCo to Mailman transfer	Dirk Hoffmann	In Progress	7	30/08/2013	40 %	Feedback on "wrong" mailman addresses

Interoperability (1)

- *In principle*, ShPt “services” interface allows all data (content, meta-content, files) manipulation.
- Authentication is tricky.
 - HTTP authentication barely used nowadays
 - SSO or certificates are “remembered” by means of cookies.



And then just cURL

- cmdline, python, perl, ...

Interoperability (2): SOAP

- **Simple Object Access Protocol (SOAP)**
 - general standard, implemented by SharePoint

HTTP headers omitted

- **Query (POST)**

```
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  <soapenv:Body>
    <GetGroupCollectionFromSite
      xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/" />
    </soapenv:Body>
  </soapenv:Envelope>
```

- **Answer**

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  <soap:Body>
    <GetGroupCollectionFromSiteResponse xmlns="http://schemas.microsoft.com/sharepoint/soap/directory/"
      <GetGroupCollectionFromSiteResult><Groups>
        <Group ID="3" Name="Group1" Description="Description" OwnerID="1" OwnerIsUser="False" />
        <... more Group elements omitted ...>
      </Groups></GetGroupCollectionFromSiteResult>
    </GetGroupCollectionFromSiteResponse>
  </soap:Body>
</soap:Envelope>
```

- **User friendly CTA tools implemented in python.**

■ Representational State Transfer (REST)

- SharePoint2010 specific API

■ Request encoded in URL

- `http://myserver/_vti_bin/ListData.svc`
- `http://myserver/_vti_bin/ListData.svc/ProjectOffice`
- `http://myserver/_vti_bin/ListData.svc/ProjectOffice/$metadata`
- `http://myserver/_vti_bin/ListData.svc/ProjectOffice/People(2)`
- `http://myserver/_vti_bin/ListData.svc/ProjectOffice/People?$orderby=Name`
 - `$filter` (WHERE), `$expand` (JOIN), `$select`, `$skip`, `$top`

■ Result in XML;

we use python (or awk/sed) for digestion.

Summary

- **CTA member administration and collaborative workflows implemented on four (principal) feet: SharePoint2010 – InDiCo – Mailman + LDAP**
- **InDiCo still without alternative**
- **Good universal “group registry” not for free**
- **SharePoint is expensive, but valuable framework, if costs are shared (a bit like Oracle).**
 - Work (temporary staff, trainee) on ShPt highly qualifying
 - Standard tools and options satisfactory for most cases
 - Development and interoperability not easy, but feasible