

The start of the Windows Project at DESY

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IT



HEPiX-HEPNT Spring 2002, 16/04/2



The Project assignment plan

- Referee : Frédéric Hemmer (CERN)
- Last review and recommendation of the PAP by the DESY Computer Review Board (CRB) at May 16th 2001 (<http://www-z.desy.de/gremien/crb/minutesd/minutesd.html>)
- The DESY directorate decided at August 9th 2001 that the “Windows 2000 Migration” Project can be started and in combination that the IT group will be restructured into four branch groups and that the Windows NT business will be managed inside the IT group.
- A hand-over from the NT project to the IT group started, three new employees for the new project and the project head have to be find.



The Project team

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- **Melvin Alfaro (IT)**
Reinhard Baltrusch (IT, head)
Henner Bartels (IT)
 - **Ralph Heintz (M)**
Andreas Labudda (MST)
 - **Kazimierz Popinski (F)**
Helga Schwendicke (DV Zeuthen)
Gunter Trowitzsch (DV Zeuthen)
 - **N.N. (DV Zeuthen)**



The Project goal

Smooth migration of the existing Windows NT 4.0 infrastructure in the domain DESYNT into one new structured Windows 2000- (Windows.NET-) Active Directory domain with Windows XP Professional as preferred client operating system.

This implicates :

- Build up of the new domain parallel to the domain DESYNT.
- The domain DESYNT has to be gradual frozen, especially under consideration of the NT computers used for the accelerator controls (mission critical).
- During the migration a transparent and domainspreading access on resources of both domains must be a possible for the DESY groups and several users (see HEPiX/HEPNT Spring 2001, M. Köhler : „Smooth migration or how to preserve access rights during a win2000 migration ?“)



The Project goal (II)

This implicates :

- **Migration of workstations and users by naturally evolution,**
 - if a user gets a new PC the computer and user account can**
 - be moved into the new domain.**
- **It's under decision of DESY groups to migrate their Windows environment smoothly.**



Focus points for the Project

- Only one new AD domain (also no subdomains)
- Consideration of both sites (Hamburg – Zeuthen)
- Active Directory with delegation structure (supporting the DESY groupadministrator concept)
- Sensible usage of group policies
- Reliability and redundancy (hardware, additional DC for AC)
- Transparency for the userhood
- Interoperability (systemspreparing services)
- Concepts for deployment and systemrecovery of workstations, support for laptops and home PC
- Continuous operating after the project must be ensure



Documentation

Basic decision points for integration in the heterogeneous

surrounding

- DNS zone / domain name : desy.de instead of win.desy.de ?
 - + DDNS-system available (Lucent QIP)
 - + simple namespace
 - unknown implications for other systems ?
- Kerberos : UNIX, Win2K or both ?
 - more than one DC is needed (two sites, redundancy)
 - trustrelationship to DESYNT (NTLM is needed)
 - are there changes under .NET ?
- Common homedirectory : make this sense ?
 - features of NTFS 5 lost



Basic decision points inside the windows surrounding

- **Application deployment : NetInstall ?**
 - + **Enough experience, next time also for XP products**
 - + **MSI supported**
 - **is integration in AD (grouppolicies) possible ?**
 - **the green/yellow PC concept is possible with grouppolicies**



Die Project Tasks

- Arranging two test-environments (sitespreading)
- Plan and test the Active Directory structure
- Consulting of the DESY groups
- Installation of the domain controllers, AD inclusive
- Porting, testing and deployment of the administrative tools
- Migration of users
- Training of groupadministrators and end-users (*)
- Porting of the core and the role based applications (*)
- Deployment of applications (*)



*) Within the scope of the project, but not carry out by the project group

Die Projekt Tasks II

- **Application training for end-users (*)**
- **Introduce new machines into the AD domain**
- **Migrating and/or adding of resources**
- **Projectoperating of the new Windows domain**
- **Permanent operating of the new Windows domain (*)**
- **Stopping new developments in the domain DESYNT (*)**
- **Phase out DESYNT (*)**

 (*) : Within the scope of the project, but not carry out by the project group

Important milestones

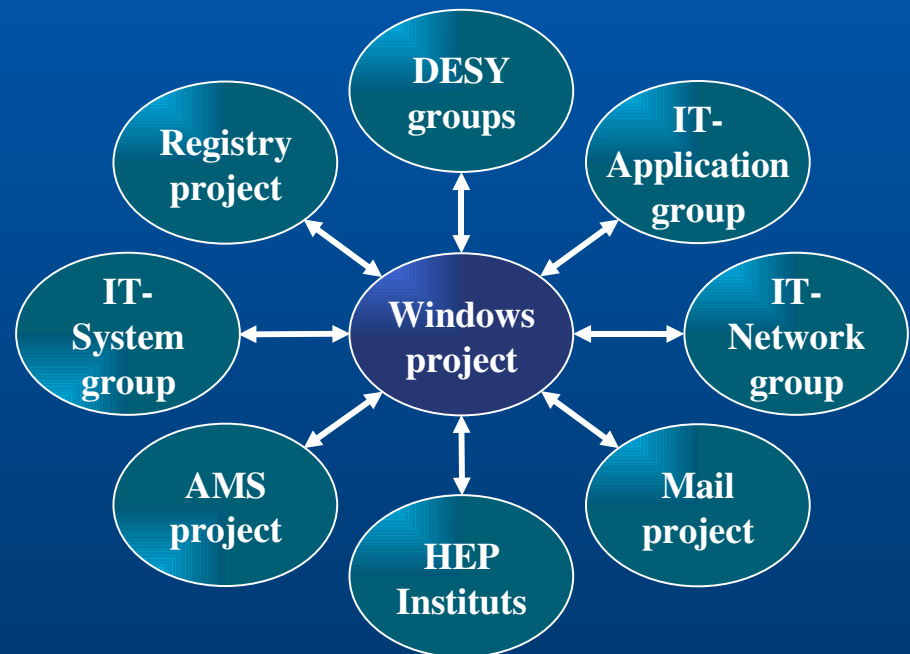
- **Kick off : March 27. 2002**
- **Clarification of basic decisions (precondition for some of the following milestones)**
- **Active Directory prototype designed (4. quarter 2002).**
- **Domain Controller with AD are available (1. quarter 2003).**
- **Administrative tools (central /decentral) available (2. quarter 2003).**
- **Concept and infrastructure for application deployment available (2. quarter 2003).**
- **Begin of the migration of users (2. quarter 2003).**
- **Begin of resource transfer out of DESYNT (3. quarter 2003).**



Transfer the AD domain into a permanent operating (1. quarter 2004)

Projectcooperation und -coordination

- Exchange and discussion with the IT branch groups, running and following projects; servicesupport with mutual input and preconditions.
- Exchange and discussion with several DESY groups; investigation of requirements and support options.
- Information exchange with other HEP institutts.



Internal Project reporting

- Give a report to the DESY CRB as soon as milestones are reached.
- Give a report to the DESY Computer User Committee as monthly task.
- Report to the IT management, permanent information exchange with the IT branch groups.
- Statusreports und information exchange inside the DESY Windows usermeetings.
- Information exchange and discussion with members of DESY groups and formations in small teams



Follow-up projects

- **Mail Project**

- **One common solution for whole DESY ?**
- **Migration to Exchange 2000 is not real part of the Windows project, but must be taken into account while building the AD.**

