

# Global Directory Services

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Data Stewards Briefing

June 20, 2006



# Overview of Briefing

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- GDS Definition
- Value of GDS
- Structure
- Current Status
- Data Stewards – Your Role, Our Commitment
- Identity Management
- Next Steps

# GDS Definition

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# Definition

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Global Directory Services provide a single location through which prospective users of restricted resources can be authenticated (determined to be the persons they claim to be) and authorized (allowed access to those resources, and only those resources, to which they are entitled). Examples of restricted resources include the following:

- **Information:** online student directory available only to current students, faculty and staff; individual student information accessed through OASIS (grades, class schedule, University account, etc.)
- **Services:** email accounts, library circulation, use of USCard as a debit card, computers in public user rooms
- **Facilities:** residence halls, laboratories, offices that manage access electronically (i.e., by swiping magnetized cards or entering a code)

# Global?

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- Information is organized in a way that it can be accessed (with appropriate authorization) from anywhere on the Internet
- Each organization can construct the directory to meet local needs, as long as it adheres to a common schema
- EduPerson schema – Collaborative effort sponsored by EDUCAUSE and Internet 2; facilitates communication and collaboration among universities



# Directory?

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GDS is NOT an open pool of information that anyone can access to look up whatever information they want!

It is a directory in the sense that term is used in computer networks: a collection of user attributes and information about what network resources they can access.

# Services?

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- USC GDS primarily supports
  - Authentication – confirming a prospective user’s identity
  - Authorization – determining that an individual is approved to use a requested resource
  - Personalization – displaying **to the user** relevant information about her/himself
- Online white pages data
- Look up and search capabilities for specified groups



# USC GDS Mission Statement

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- Global Directory Service (GDS) is an identity management tool that provides authentication and authorization resources to the USC community.
- GDS provides access to specified attributes of members of the USC community (among them, active students, faculty, staff, sponsored guests, affiliates, etc), for the purpose of providing selected electronically provided or managed services.
- GDS **IS NOT** a data warehouse, an alternative to access approval by the data stewards of our information systems, or a source for populating local data bases and networks.

# Value of GDS

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# Value of GDS

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- Improve user experience
- Simplify service provision
- Increase security
- Decrease cost
- Enable multi-university collaboration

# Value, cont.

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- Improve User Experience
  - Fewer logins and passwords
  - More customized service access
  - Earlier, faster access
  - Current data
- Simplify Service Provision
  - Local process to authenticate and authorize users not needed
  - Data feeds, when needed, available from single source
- Increase Security
  - Reduce need to hold personal information in local databases
  - Can “see” all people on network and what they can access
  - Can revoke access quickly if needed

# Value, cont.

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- Decrease Cost
  - Reduce overhead for providing electronic services
  - Limit resource access to intended users
- Enable Collaboration with Other Universities
  - Consistent with Internet 2/EduPerson schema
  - Member of InCommon federation

# Structure

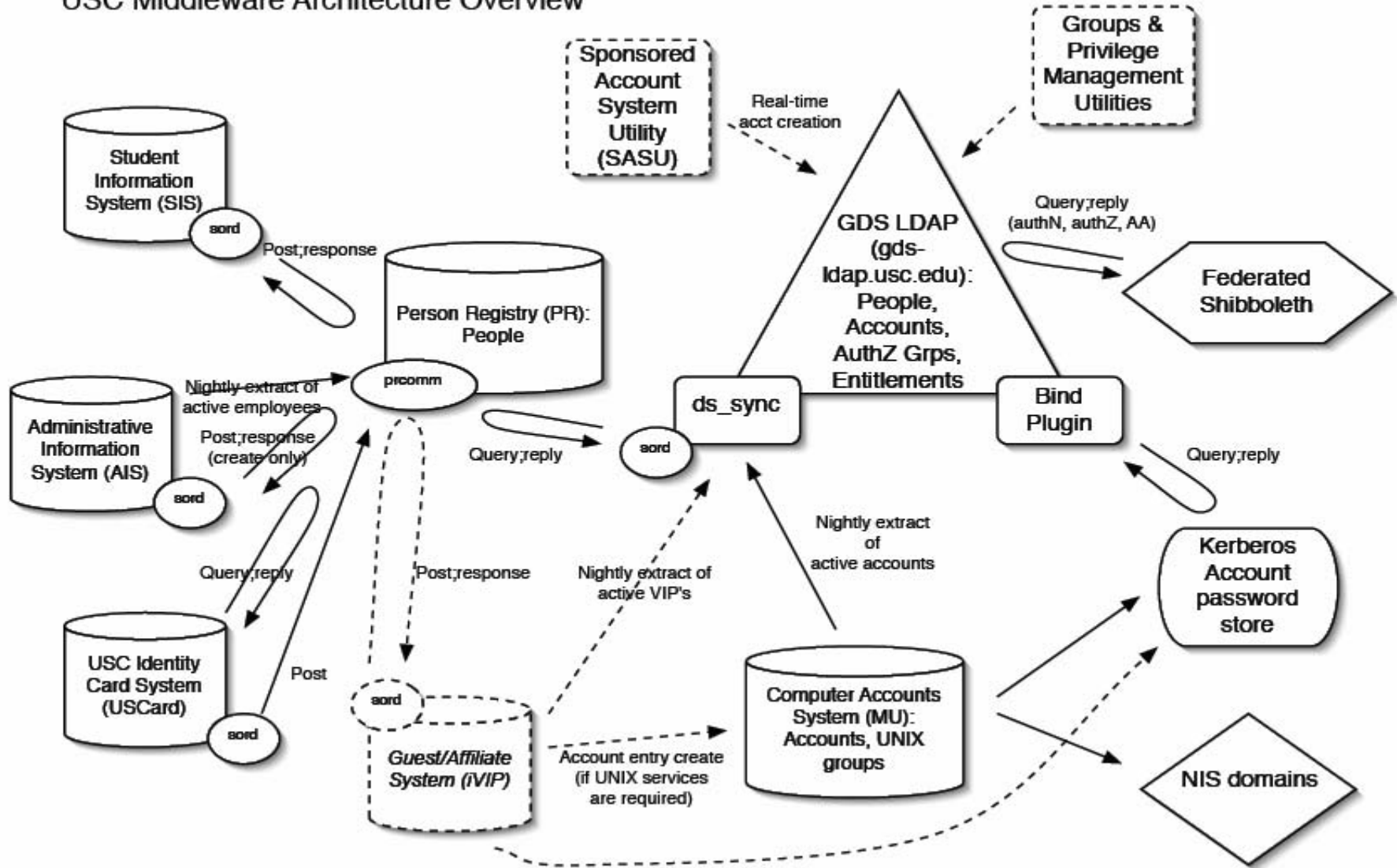
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# Components

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- Systems of Record
  - SIS, PPBS, USCard, Advancement CRM
- USC ID numbers
  - Assigned and managed for all constituencies in a single process
- Person Registry
  - Master database with identity records and attributes needed to support services
- Directory Services
  - Determine service authorization and assign entitlements
  - Support myUSC portal, Blackboard, Library, White Pages, etc.

# USC Middleware Architecture Overview



# Current Status

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# In Operation

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- Architecture, processes and definitions have been developed
- Supports authentication and authorization for departmental applications. Examples:
  - CAPS
    - Professional Development course registrations
    - Worker's Compensation incident reports
  - School of Theatre
    - Advisement system
  - Student Affairs
    - Liability waiver for Lyon Center
- Supports email lookup for some email clients

# In Progress

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- ❑ iVIP – Guest/Visitor system will allow departments to sponsor access to electronic privileges for people who are not members of our core constituencies (active students, faculty, staff, alumni, etc.)
- ❑ New online white pages – controls access by individual instead of IP address, provides faster information updates, can support more granular release of data
- ❑ myUSC portal – provides customized access to a variety of information sources
- ❑ Blackboard – course management software allowing access to varying content depending on instructor or student role
- ❑ MyInfo – enables people to access their own person and account records

# Data Stewards

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Your Role

Our Commitment



# Role of Data Stewards

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- Institutional responsibility for appropriate use of personal information
- Approve data transactions for GDS
  - Copying attributes from SOR to PR
  - Access to data through GDS
- Advise in development of “policies” and procedures for GDS



# Our Commitment to You

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- Data Stewards are part of the GDS development process -- GDS does not make or change the rules for accessing personal information
- We will use the data entrusted to us only in the ways you have agreed to
- We will ask to move data into the PR/GDS system only when it is useful for identity management or service delivery
- We will maintain records of decisions and system transactions

# Participation in the Process

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- Data Stewards are represented on
  - Steering Committee
  - Working Groups
    - Data Oversight (formerly the Merge Team)
    - iVIP
    - Faculty and Staff
- Individual consultation on relevant developments
- Periodic briefings

# Safeguarding Data

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- Data Stewards
  - Add attributes to PR/GDS
  - Access to attributes for applications
- Attribute Access Request Process
  - Includes technical and policy consultation
  - Endorsement from data stewards
  - Approval of Directory Steering Committee
  - Requires periodic renewal of access
  - Requires agreement by the requestor to abide by program rules

# Identity Management

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# Identity Management

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- Definition
- GDS is critical infrastructure
- Logical next step
- Requires community buy-in, expected participation



# IdM Definition

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Identity management (IdM) is a broad administrative function that identifies individuals in a system (in this case, USC) and controls their access to resources within that system by associating user rights and restrictions with the established identity.



# IdM Institutional Perspective

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All systems and databases that contain information about people (excluding patients and clinical trial participants) should be part of the IdM program

- Not one big system
- Strong reciprocal relationships
- Expectation to use central resource for authentication, authorization and personalization

# Next Steps

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# Next Steps for GDS/IdM

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- ❑ Secure executive endorsement of IdM program
- ❑ Articulate institutional expectations
- ❑ Establish organizational home
- ❑ Continue building GDS
- ❑ Add iVIP, Alumni/Donor/Parent system
- ❑ Add other SOR's – Emeriti, USCard



# What we want from you

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- Continued participation, directly and/or through designees
- Advocate of GDS/Identity Management
  - Support formal data access request process
  - Include GDS needs in prioritizing system development projects
- Discontinue data downloads to departments for processes GDS can support (authentication, authorization)
- Advocate for a real enterprise data warehouse



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