



SUNGARD HIGHER EDUCATION www.sungardhe.com

Value Based Security Overview

Before we get started....



- Familiarize yourself with the virtual classroom interface
- Review rules of etiquette

SUNGARD HIGHER EDUCATION www.sungardhe.com 2

Virtual Classroom Etiquette

CHAT

- Use chat to ask questions
- Use private chat when you have to step away for a minute

AUDIO

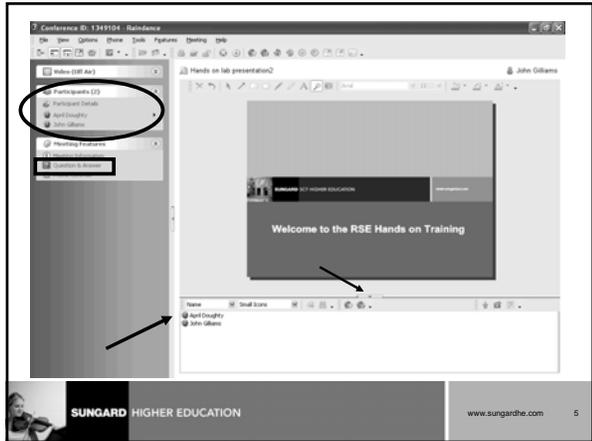
- If you do not have a mute button, *6 = mute and *7 = un-mute
- Do not place phone on "HOLD"

THANK YOU FOR YOUR COOPERATION!

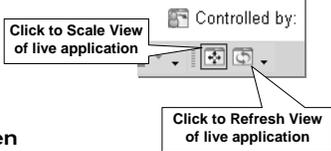
SUNGARD HIGHER EDUCATION www.sungardhe.com 3

In Case of Difficulties....

- Close your web browser and re-log into the event
- Send a private chat message to the moderator
- Contact virtual classroom support
 - Press *0* to reach technical support or dial 888-272-2939 (U.S.) / 610.578.6323 (International)



Viewing Features



F11 for Full Screen
Esc to return to Normal View



Introductions

- **Instructor**
 - Name
 - Title
 - Banner Experience
- **Participants**
 - Name
 - Organization
 - Title/function
 - Job responsibilities
 - Banner Experience
 - Expectations

Course Goal

The goal of this course is to introduce you to the new Value Based Security and Oracle Fine-Grained Access Control functionality delivered within Banner 7.

Agenda

- **VBS Using FGAC**
 - Overview
 - Set Up
 - Example
- **Personal Identifiable Information (PII)**
- **Protection of Sensitive Data**

Security Considerations - Banner

- **Application security**
 - Standard, must be set up
 - Job-responsibility based, so easy to set up
- **Hiding fields on forms**
 - "Protection of Sensitive Information"
- **Module-based security**
- **Self-service, Luminis Security**
- **VBS/FGAC**
 - Optional, powerful, customizable
 - Not hard to set up



VBS Definition

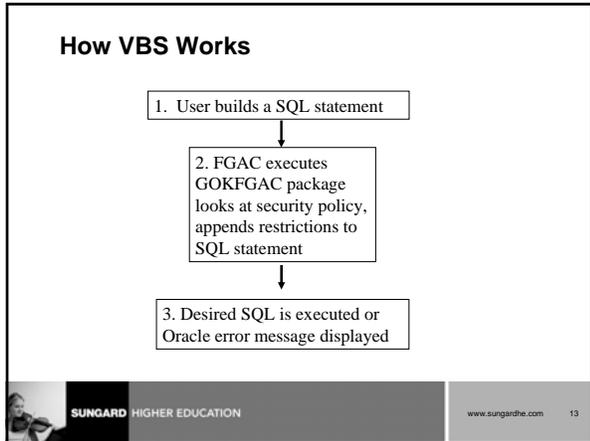
- **Value Based Security**
- **A Banner 7.0 replacement for existing General, Student, and Financial Aid Value Based Security**
- **Defined for individual users as needed**

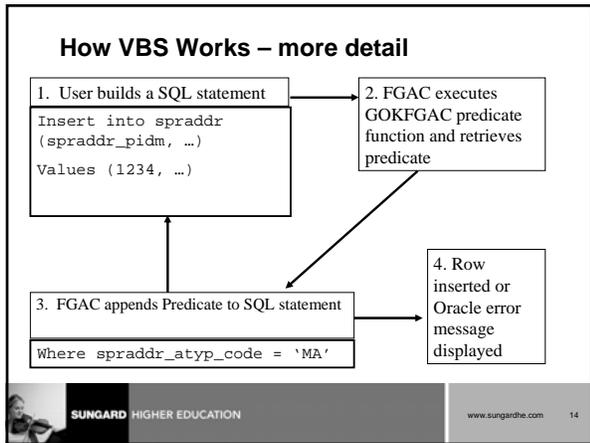


FGAC Definition

- **Fine-Grained Access Control**
- **A means of providing row level security based upon existing columns and tables in Banner**
- **Not a Sungard Higher Education invention – ORACLE functionality**





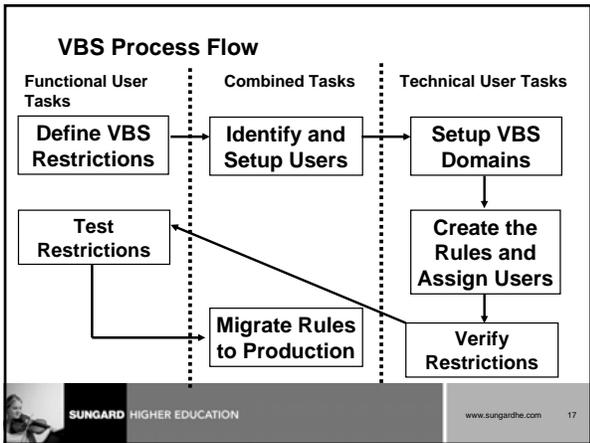


- ### Terminology
- VBS
 - FGAC
 - Predicate
 - Domain
 - Domain Driver
 - Policy
 - Business Profile
- SUNGARD HIGHER EDUCATION www.sungardhe.com 15



SUNGARD HIGHER EDUCATION www.sungardhe.com

Set Up



Analysis Worksheet

Performing this analysis will help you to:

- fill in the pieces that are required for setting up the VBS group rule
- trace ramifications of the rule
- analyze restrictions and possible outcomes

SUNGARD HIGHER EDUCATION www.sungardhe.com 18

What are these technical “elements”?

- **Group** – a grouping of restrictions
- **Business Profile** – will assign users to this, the users whose access will be restricted

- ****** You will be creating Groups and Business Profiles**

Defining the Domain

- **Identify the domain codes using GTVFDMM**
- **Identify the driver rules using GORFDMN**
- **Can look at the domain tables using GORFDPL**

Setting Up the VBS Groups and Group Rules

- **Groups:** This is a group of restriction that are needed based on the use-case. Create these with GTVFGAC
- **Group Rules:** Set up the predicate for group rules with GOAFGAC

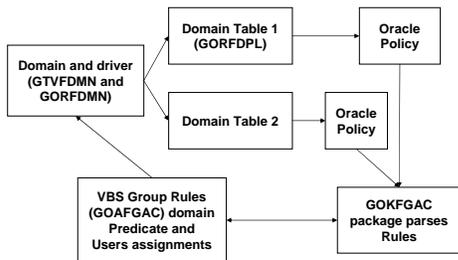
Establishing the Business Profiles

- Create a Business Profile name using the FGAC Business Profile Validation Form (GTVFBPR)
- Assign user IDs to the business profile using the FGAC Business Profile Assignments Form (GOAFBPR)

Defining the Policies

- The policies are the actual Oracle objects that govern the use of the VBS elements you are creating
- Created by the DBA team
- Run `gfvbsaddpol.sql` to create the policies
 - Note: can drop the policies by running `gfgacdroppol.sql`

Process Flow Diagram



Viewing the Restrictions

Use GOIFGAC to:

- display the status of the policy and the predicate for a table
- view your predicate and see what restrictions are in effect for each user ID/table

Test all rules and objects

- Create data with intended restricted values
- Apply rule to sample User
- Test objects with and without VBS
- Verify that processing is not adversely impacted by new VBS rule

Migrate the Rules and Profiles

- Use completed VBS Analysis Worksheet

GORFDPL

- Activate the tables within the domain(s)

GOAFGAC

- Activate the group rule
- Set the effective date to a future date

End-User Training

- Document what the error messages mean
- New procedure documentation for handling data entry requests that users no longer have access to work on
- Contact list of managers/help desk staff to call with problems

Review

1. Before building the VBS group rule, what should be completed to fill in the pieces that are required for setting up the rule, and to be able to trace its ramifications?
2. True or False: A domain is often the central table for a module or processing area.

Continued on next slide

Review, Continued

3. Which form is used to:
 - ♦ enter the domain driver _____
 - ♦ define the domain codes and identify the domain as a VBS type _____
 - ♦ enter the domain tables _____



SUNGARD HIGHER EDUCATION www.sungardhe.com

Day-to-Day Operations

Viewing Results

- Data a user is allowed to view is determined by the setup of the security
- A user won't see the data when "select" restrictions are in place

SUNGARD HIGHER EDUCATION www.sungardhe.com 38

Viewing and Changing Data

In some cases, a user may be allowed to view all data but can change only the data that meets specific criteria.

Need to train users on vague error message statements

Oracle Bug 2952900

- Oracle's behavior does not return an error message if an update/delete is attempted on a table where the user has full select privileges

SUNGARD HIGHER EDUCATION www.sungardhe.com 39



SUNGARD HIGHER EDUCATION www.sungardhe.com

Security Overview

VBS and Banner Security

Banner Form

SPAIDEN

Address Tab

MA Mailing

GSASECR

JANE_DOE	CLERK_CLASS
JANE_DOE	AR_MGR_CLASS

GSASECR

CLERK_CLASS	SPAIDEN	BAN_DEFAULT_M
CLERK_CLASS	SPAPERS	BAN_DEFAULT_M
CLERK_CLASS	GOAEMAL	BAN_DEFAULT_M

Continued on next slide

SUNGARD HIGHER EDUCATION www.sungardhe.com 41

VBS and Banner Security

Banner Form

SPAIDEN

Address Tab

MA Mailing

GOKFGAC

f_select_fnc

GORFDPL

GB_SPRADDR_VBS	SPRADDR
----------------	---------

GOAFGAC

GB_SPRADDR_VBS	REG_CLERK_PROFILE
----------------	-------------------

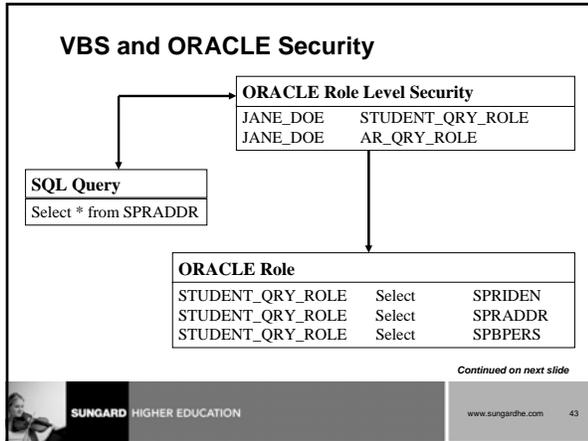
GOAFBPR

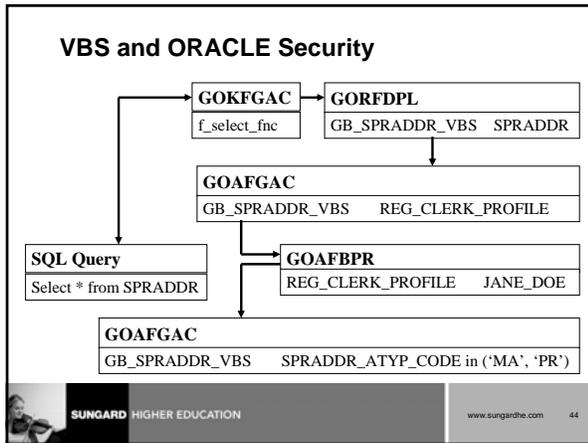
REG_CLERK_PROFILE	JANE_DOE
-------------------	----------

GOAFGAC

GB_SPRADDR_VBS	SPRADDR_ATYP_CODE in ('MA', 'PR')
----------------	-----------------------------------

SUNGARD HIGHER EDUCATION www.sungardhe.com 42





Review

1. How do you determine what restrictions are in place for you?
2. True or False: The data a specific Banner User ID is allowed to view is determined by the setup of the security.
3. True or False: A User ID is not allowed to view a specific type of data. When this user attempts to view that data, he or she will receive an error message.

SUNGARD HIGHER EDUCATION www.sungardhe.com 45



SUNGARD HIGHER EDUCATION www.sungardhe.com

Questions and Answers



SUNGARD HIGHER EDUCATION www.sungardhe.com

Personal Identifiable Information

Personal Identifiable Information

- PII secures Person information, and is only on the selection of data
- Philosophy of PII: User can access PII based on their business needs (job responsibilities)

SUNGARD HIGHER EDUCATION www.sungardhe.com 48

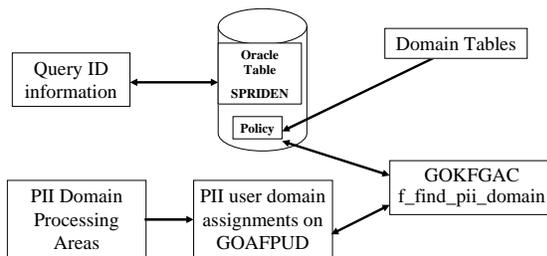
How does PII work?

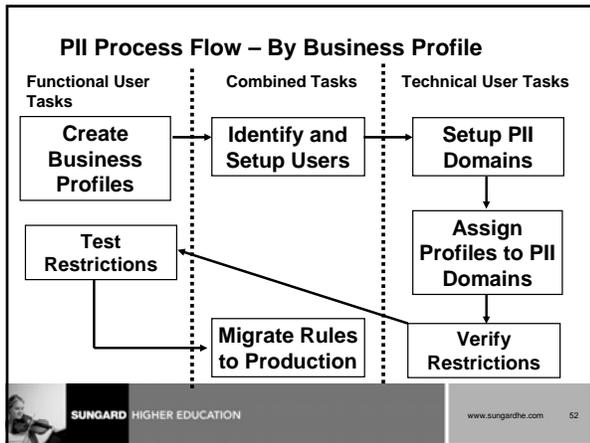
- To have access to a SPRIDEN row, the PIDM must have a row in one of the PII Domains the user is assigned

VBS and PII

- Both VBS and PII use FGAC to restrict the data
- Both restrict data but in different ways
- Implementation differences

PII Restrictions and Banner








HIGHER EDUCATION
www.sungardhe.com

Questions and Answers




HIGHER EDUCATION
www.sungardhe.com

Protection of Sensitive Data

Protection of Sensitive Data

- Concealing
- Masking
- Removing visibility

Process Introduction

- Identify the fields that need protection
- Establish the fields that need protection
- Review the protected fields

Identify Fields that Need Protection

- Form name
- Block name
- Field name
- Data type
- Field length

Establish the fields that need protection

- Define the fields that need protection in the form GORDMCL
- Add the field protection rule in the form GORDMSK

Review the protected fields

- Is the form displaying the information correctly?
- Do you need to protect any other fields or icons?
- What other forms display the same data?

Protection of Sensitive Data – Issues

- Oracle does not support character masking
- Do not protect required fields
- Trickle down effect -
 - Some fields are displayed on more than one form
 - Have you protected the correct data?
 - How does the form look after removing a field?



SUNGARD HIGHER EDUCATION www.sungardhe.com

Questions and Answers



SUNGARD HIGHER EDUCATION www.sungardhe.com

Thank you for your participation
