

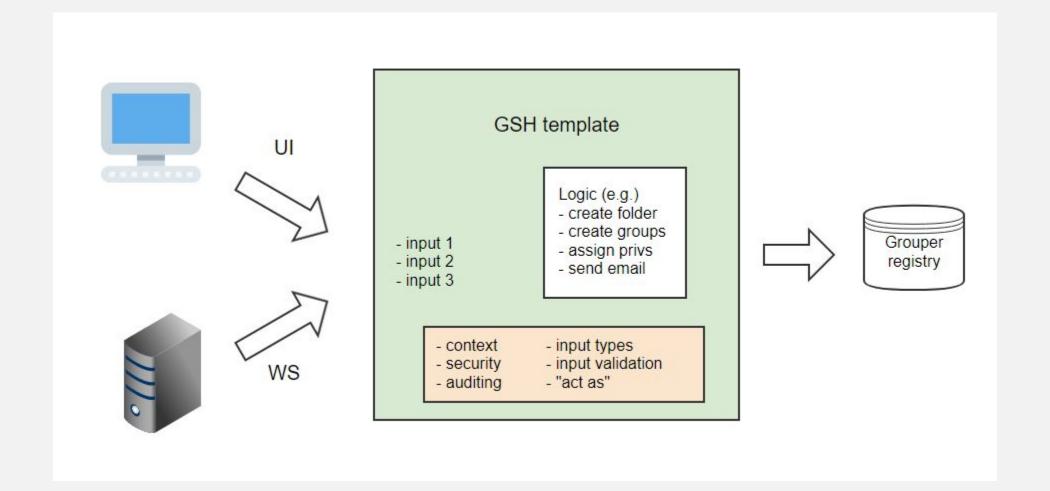
PennGroups 2022

**GSH templates** 

#### Agenda

- GSH templates
- Intro
- SRA VPN
- Banner security
  - Map Banner groups to other apps
  - User report
  - Environment compare
- Wharton apps

#### **GSH** templates



#### **GSH** templates

- Grouper admins can make GSH templates
- Expose via UI, WS, or another template
- Auditing runs as user
- Do not need a Grouper terminal or GSH prompt
- Can configure who can run it, from which folder
- Run as self or certain user or admin
- Inputs with types and validation

## Penn GSH templates

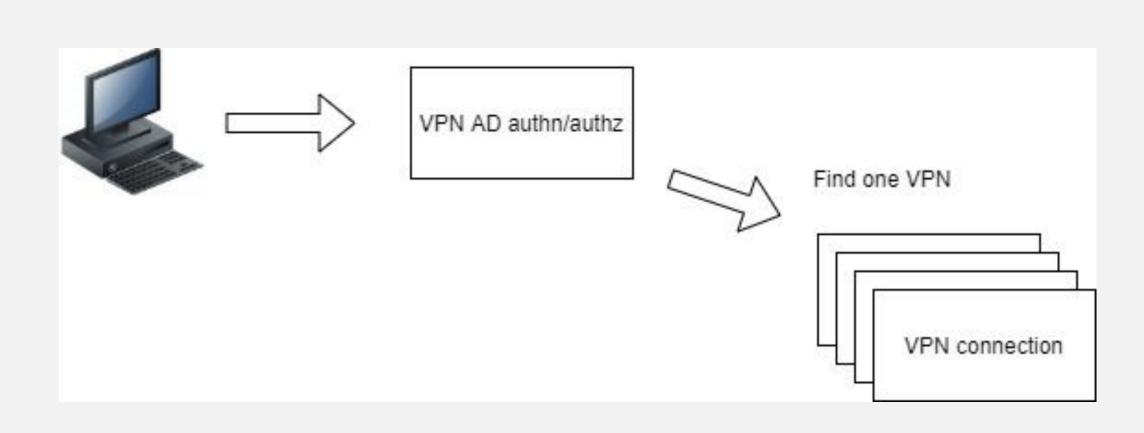
Home > Miscellaneous > GSH templates

#### **GSH** templates

Actions ▼

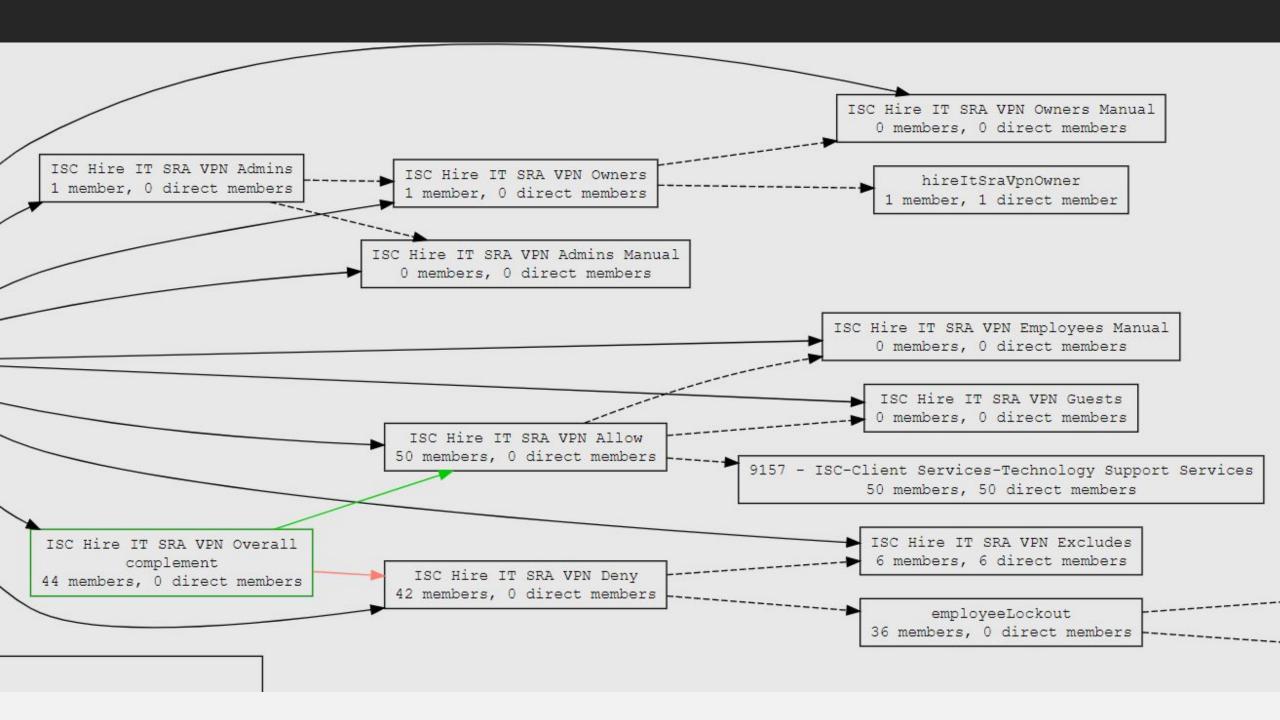
Config id	Enabled	Actions
groupAttributeLoader	Enabled	Actions ▼
impersonationWebloginAdd	Enabled	Actions ▼
impersonationWebloginRemove	Enabled	Actions ▼
inheritedPrivilegeSave	Enabled	Actions ▼
kerberosPrincipals	Enabled	Actions ▼
mchyzer	Enabled	Actions ▼
membershipCount	Enabled	Actions ▼
milesg	Enabled	Actions ▼
ngssCourseleafTokens	Enabled	Actions ▼
ngssE201Testing	Enabled	Actions ▼
ngssSecurityEnvReportRun	Enabled	Actions ▼
ngssSecurityMapBannerGroupsToOutsystems	Enabled	Actions ▼
ngssSecurityUserReportRun	Enabled	Actions ▼
snowflakeSandboxlpAddress	Enabled	Actions ▼
sraVpnAdd	Enabled	Actions ▼
sraVpnManage	Enabled	Actions ▼
sraVpnRemove	Enabled	Actions ▼
whartonAppCreate	Enabled	Actions ▼
zoomDeprovisioning	Enabled	Actions ▼

#### SRA VPN (department level)

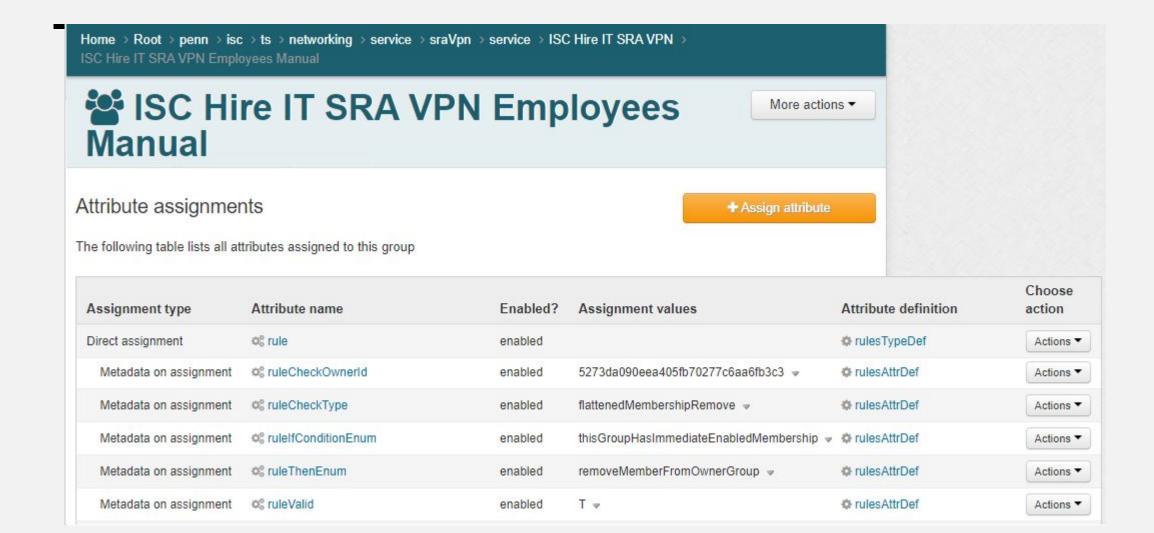


#### SRA VPN (department level)

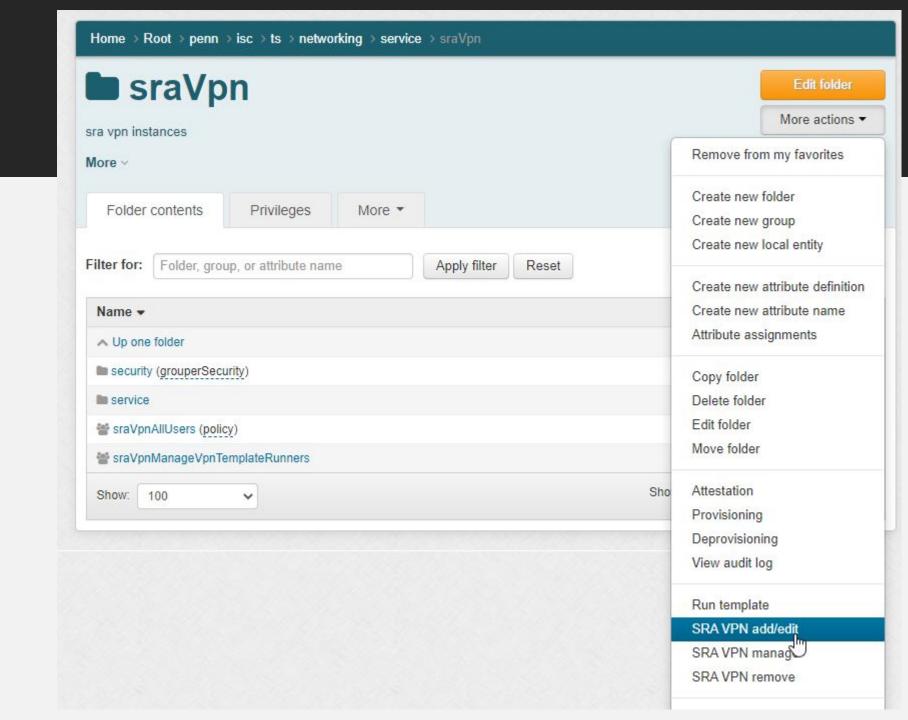
- LDAP provisioning
- "Roles" (single choice)
- Grouper is authoritative
- Eligibility requirements
- Exceptions
- Rules
- Delegation
- Template for easy setup
- Template for easy management
- Deprovisioning
- Reports
- Attestation



#### SRA VPN rules

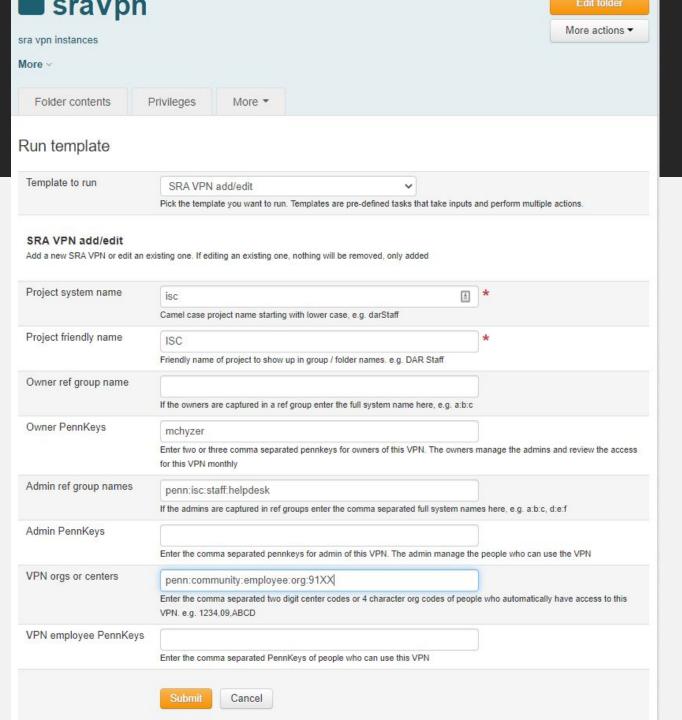


### SRA Templates



### SRA Setup Template

- Run by networking staff
- Can add or edit



## SRA Setup Template Outp

Imagine doing these steps by hand???? Project folder INSERT: penn isc:ts:networking:service:sraVpn:service:fresStaff

Report: added to project folder: penn:isc:ts:networking:service:sraVpn:service:fresStaff

Report scheduled

Owners group INSERT: penn isc:ts:networking:service:sraVpn service:fresStaff fresStaffSraVpnOwners

Add: grouperSecurity type on Owners group: INSERT

Owners manual group created: penn:isc:ts:networking.service.sraVpn;service:fresStaff;fresStaffSraVpnOwnersManual

Rule added on owners manual group to require membership in: penn community employeeOrContractorIncludingUphs

Adding: Owners manual group to Owners group: INSERT

Allowing: Owners group to update Owners manual group: INSERT

Add: manual type on Owners manual group: INSERT

Adding: Jerry Cheng (chengch, 10140648) (active) Staff - Fres Information Technology Services - Information Technology Manager (also: Alumni) to Owner manual group: INSERT

Admins group INSERT: penn isc:ts:networking.service.sraVpn service.fresStaff.fresStaffSraVpnAdmins

Adding: Owners group to Admins group: INSERT

Add: grouperSecurity type on Admins group: INSERT

Admins manual group created: penn isc ts networking service sraVpn service fresStaff fresStaffSraVpnAdminsManual

Rule added on Admins manual group to require membership in: penn:community:employeeOrContractorIncludingUphs

Add: manual type on Admins manual group: INSERT

Allowing: Owners group to update Admin manual group: INSERT

Adding: Admin manual group to Admins group: INSERT

Allowing: Admins group can READ all groups in project folder: INSERT

Employees manual group created: penn:isc:ts:networking:service:sraVpn:service:fresStaffSraVpnEmployeesManual

Rule added on employees manual group to require membership in: penn community employeeOrContractorIncludingUphs

Add: manual type on Employees manual group: INSERT

Add: ref type on Employees manual group: INSERT

Allowing: Admins to update Employees manual group: INSERT

Guests group INSERT: penn isc ts networking service sraVpn service fresStaff fresStaff

Add: manual type on Guests group: INSERT

Add: ref type on Guests group: INSERT

Allowing: Admins to update Guests group: INSERT

Excludes group INSERT: penn:isc:ts:networking:service:sraVpn:service:fresStaff fresStaffSraVpnExcludes

Add: manual type on Excludes group: INSERT

Add: ref type on Excludes group: INSERT

Allowing: Admins to update Excludes group: INSERT

Allow group INSERT: penn:isc:ts:networking:service:sraVpn:service:fresStaff:fresStaffSraVpnAllow

Add: intermediate type on Allow group: INSERT

Adding: Employee manual group to Allow group: INSERT

Adding: Guests to Allow group: INSERT

Deny group INSERT: penn:isc:ts:networking:service:sraVpn:service:fresStaff:fresStaffSraVpnDeny

Add: intermediate type on Deny group: INSERT

Adding: Lockout group to Deny group: INSERT

Adding: Excludes to Deny group: INSERT

Overall group created: penn isc:ts:networking:service:sraVpn:service:fresStaff:fresStaffSraVpnEmployeesManual

Provisioning: Overall group to Kite AD: INSERT

Kite

CN=fresStaffSraVpnOverall, OU=fresStaff, OU=service, OU=service, OU=networking, OU=ts, OU=isc, OU=penn, OU=GrouperFull, OU=LocalAuth, DC=kite, DC=upenn, DC=educated and the contraction of the contracti

Add: policy type on Overall group: INSERT

Adding: Overall group is composite Allow minus Deny: INSERT

Attestation: on report: INSERT

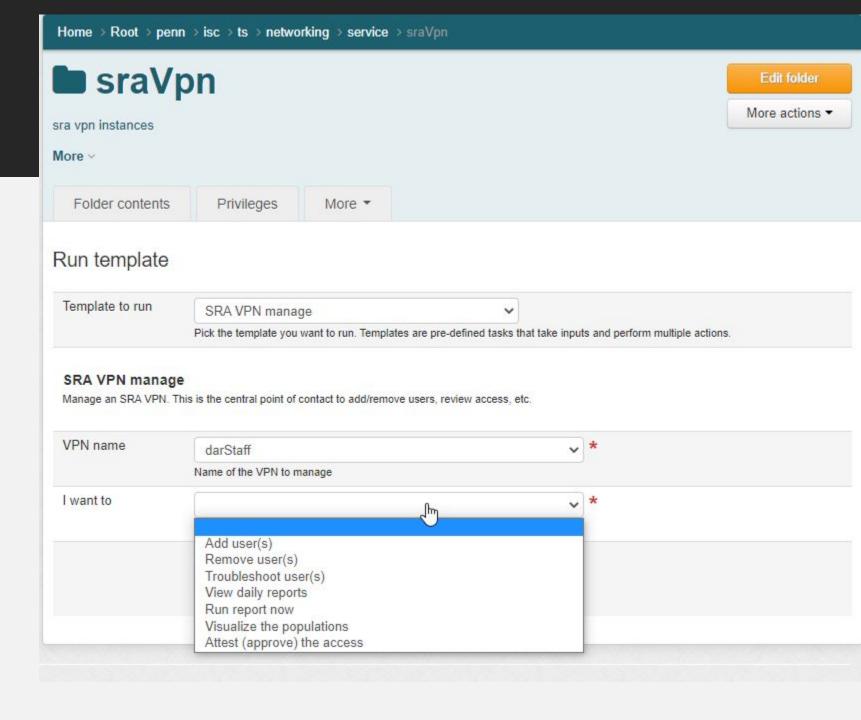
Adding: Admins group to Manage VPN template runners group: INSERT

Sent email with links and instructions to: mchyzer@upenn.edu Finished running SRA VPN template for project: FRES Staff



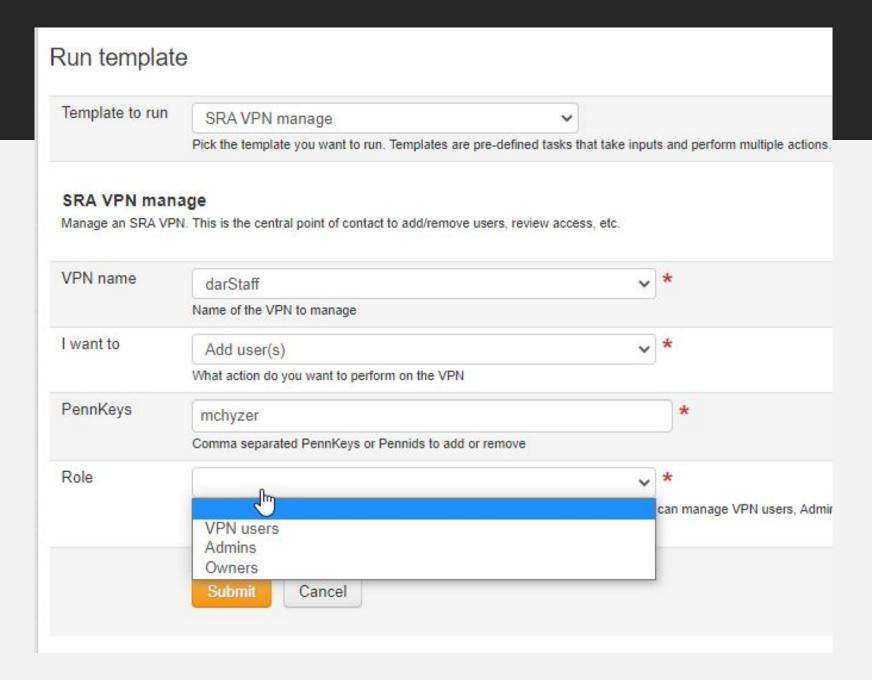
### SRA Manage Template

- Run by dept admins
- Can fully manage users easily



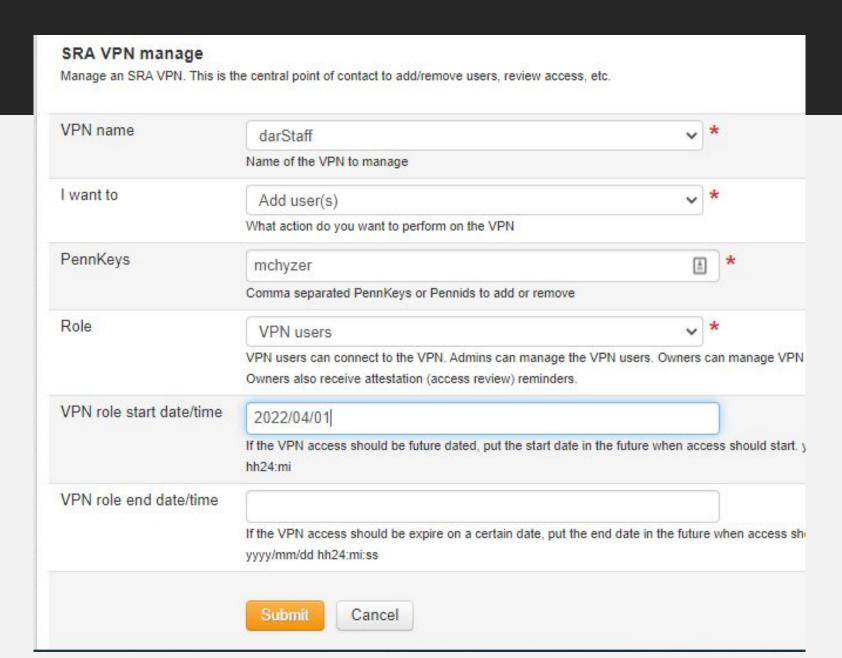
#### SRA Manage User

- Run by dept admins
- Do not need to know which group to use



## SRA Manage End date

- Run by dept admins
- Do not forget to remove guests!



#### SRA Reports

- Created by template
- Reviewable by dept admins



Edit folder

More actions ▼

This folder holds groups involved in the DAR Staff SRA VPN. Owners are two or three people who review all the memberships lists and manage the Owners and Admins. Admins can manage the VPN memberships. Owners and admins can be automatic. If owners and admins are manual, then they will lose access when no longer Penn employees. Automatic VPN members will gain/lose access based on their org or other attribute. EmployeesManual are a manual list who will have access as long as they are employees. Guests will have access and do not need to be employees.

More ~

Folder contents

Privileges

More ▼

#### Report on folder

Report actions ▼

SQL reports that generate a CSV spreadsheets can be configured on this object. The system admin can add reports.

darStaffSraVpnReport
Contains users, admins, and owner of the VPN. can_use_vpn means the user has access (if they have been in for 15 minutes and have been provisioned to LDAP). can_use_vpn_since is the timestamp when their VPN access started. could_use_vpn_until is when the vpn access was removed for this user. vpn_to_start_timestamp is the timestamp in the future the user will have access. vpn_to_end_timestamp is their end date of using the VPN. is_employee_manual means they are in the ad hoc population (otherwise to get access they would need to be in the automatic population), and if they are ever not a Penn employee they will lose access. is_guest means they can use the VPN and they do not need a Penn affiliation to do so. is_exclude means they are in the manual group of people excludes from the VPN (when the automatic population is wrong). active_employee is true if the user is an active employee at Penn or UPHS. is_owner is T (true) if the user is an owner of the VPN (can manage all lists). is_admin is T if the user can manage the VPN user lists. vpn_user_in_vpn_instances is the number of SRA VPNs the user is in, this cannot be more than 1. person_description is the user's name and affiliation.
SQL
select penn_id, penn_key, can_use_vpn, can_use_vpn_since, could_use_vpn_until, vpn_to_start_timestamp, vpn_to_end_timestamp, is_employee_manual, is_guest, is_exclude, active_employee, is_owner, is_admin, vpn_user_in_vpn_instances, person_description from penn_sra_vpn_report_v where vpn_system_name = 'darStaff'
CSV
49 12 7 * * ?
darStaffSraVpnReport_\$\$timestamp\$\$.csv
No, do not send email

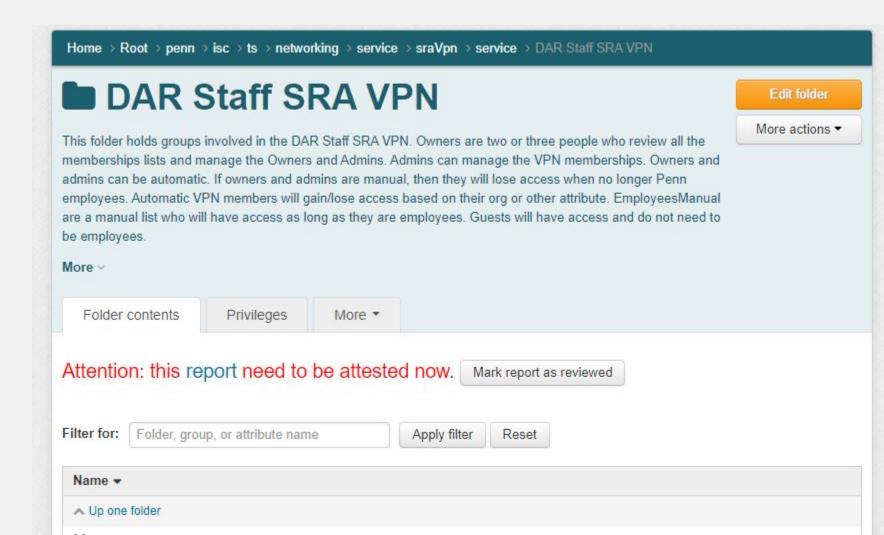
Report Name	Last run time	Status	Rows count	View details
darStaffSraVpnReport	2021/07/14 07:12:49	SUCCESS	283	View details
darStaffSraVpnReport	2021/07/13 07:12:49	SUCCESS	283	View details

## **SRA Reports**

А	В	C D	E	F	G	Н	1	J	K	L	М	N	0	P	Q	R	S	
penn_id	penn key ca	n_use_\ can_use_vpn_sin	ce could_use_vpn_unti	til vpn_to_start_timestamp	vpn_to_end_timestamp	is_employee_manual	is_guest	is_exclu	udeactive_employe	e is_own	er is_admin	vpn_user_in_vpn_instance	person_de	scription	385			
6: 09	se T	4/15/2021 13	:47			F	E	E	T	F	F		1 Yv	Sou	sa			
89 53	jo T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Je	ahn,	890			
30 95	h r T	4/15/2021 13	:47			F	E	F	T	F	F		1 Hc	exi	er, 8			
10 56	st T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Sto	eib,	164			
24 53	ms T	4/15/2021 13	:47			F	E	E	T	F	F		1 M	nith	(m			
1: 28	cl In T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Ch	is (c	hel			
84 46	co 2 T	4/15/2021 13	:47			F	E	F	T	F	F		1 Ch	carr	012,			
39 19	e j T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Je	(en	righ			
65 87	m n T	4/15/2021 13	:47			F	E	F	T	F	F		1 Me	y (m	ego			
31 57	Ix T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Liz	z (Iv	ele			
1. 26	k na T	4/15/2021 13	:47			F	E	F	T	F	F		1 Kh	vin-	Cam			
5: 50	tr T	4/15/2021 13	:47			F	F	F	T	F	F		1 Tir	ghlii	ı (tı			
72 85	d T	4/15/2021 13	:47			F	E	E	T	F	F		1 Da	on (	daja			
25	w r T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Gr	arte	r, 2			
6 14	n T	4/15/2021 13	:47			F	E	F.	T	F	F		1 Ni	erry,	672			
4: 53	st T	4/15/2021 13	:47			F	F	F	T	F	F		1 Sa	rs, 4	227			
38 17	js D T	4/15/2021 13	:47			F	E	E	T	F	F		1 Jas	van	o (j			
6: 07	jv T	4/15/2021 13	:47			F	F	F	Т	F	F		1 Jo	ely,	536			
2: 25	fe re T	4/15/2021 13	:47			F	E	F	T	F	F		1 Ke	enim				
5: 58	g sh T	4/15/2021 13	:47			F	F	F	T	F	F		1 Sh	gro	ves			
7: 23	la an T	4/15/2021 13	:47			F	E	F	T	F	F		1 Kr	erm	an			
38 99	ci T	4/15/2021 13	:47			F	F	F	T	F	F		1 Cr	rter	38			
4: 80	n T	4/15/2021 13	:47			F	E	F	T	F	F		1 Na	s (n:	no			
3: 52	k T	4/15/2021 13	:47			F	F	F	T	F	F		1 Ka	nick	(kn			
A. 85	э Т	A/15/2021 13	·17			F	F	E	T	E	E		1 Ar	ada				

#### SRA Attestation

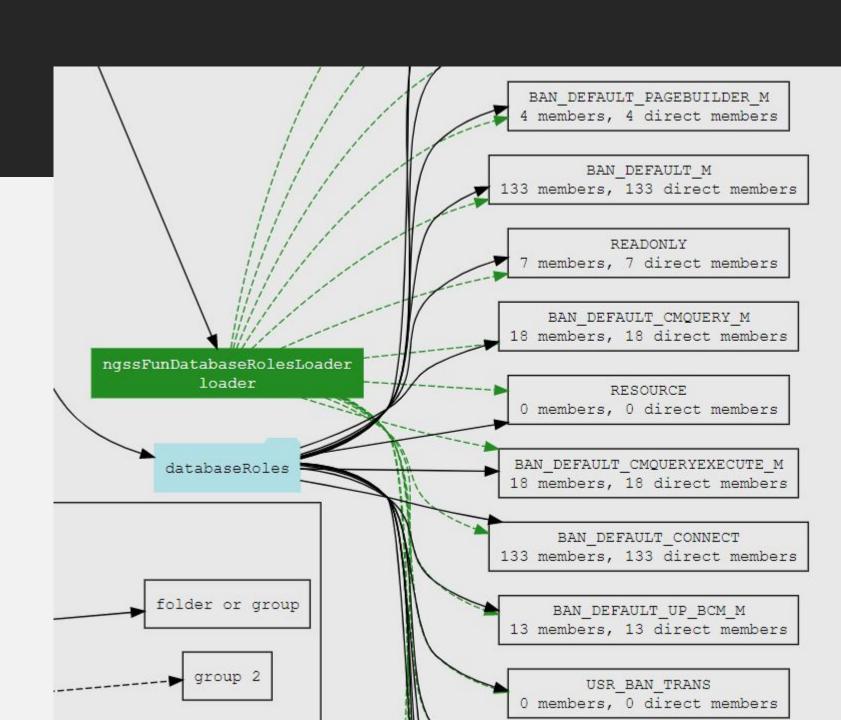
VPN owners need to review access



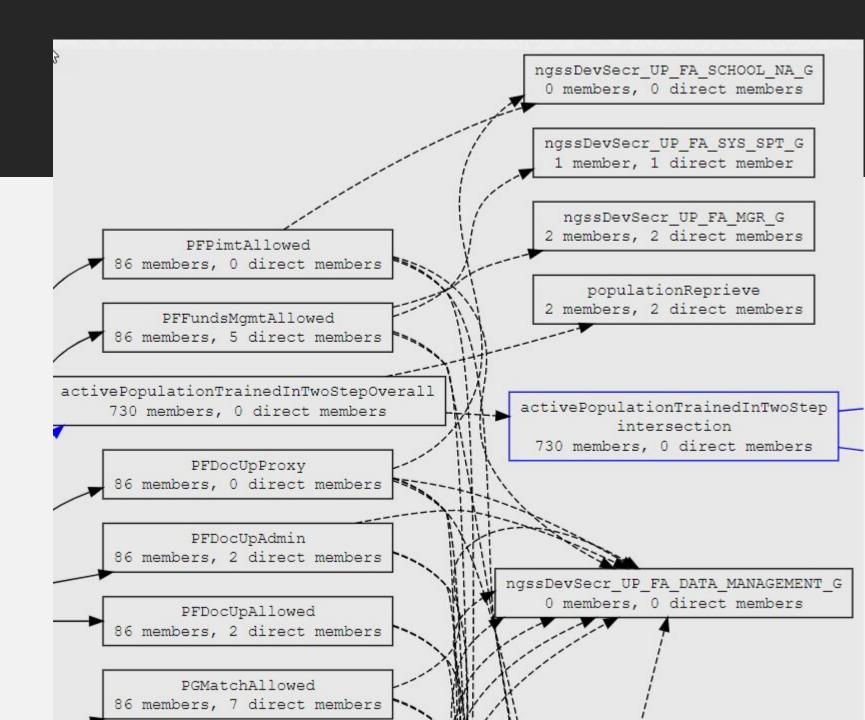
#### Banner security

- Provisioning (SAML, LDAP)
- Grouper is read-only from Banner and authoritative to other systems
- Delegation
- Templates

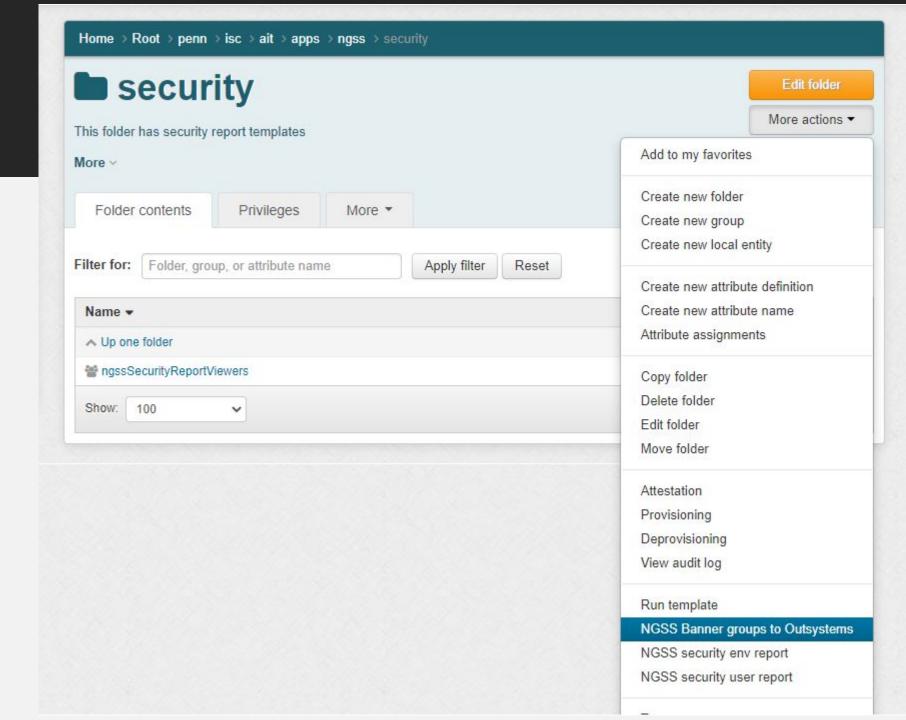
Banner security read-only from Banner

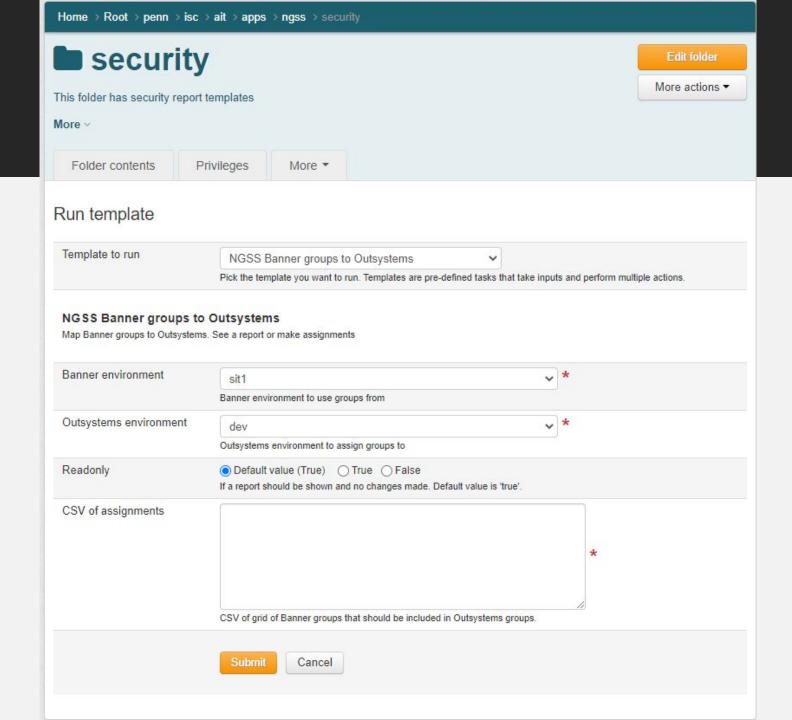


Banner security read from other apps



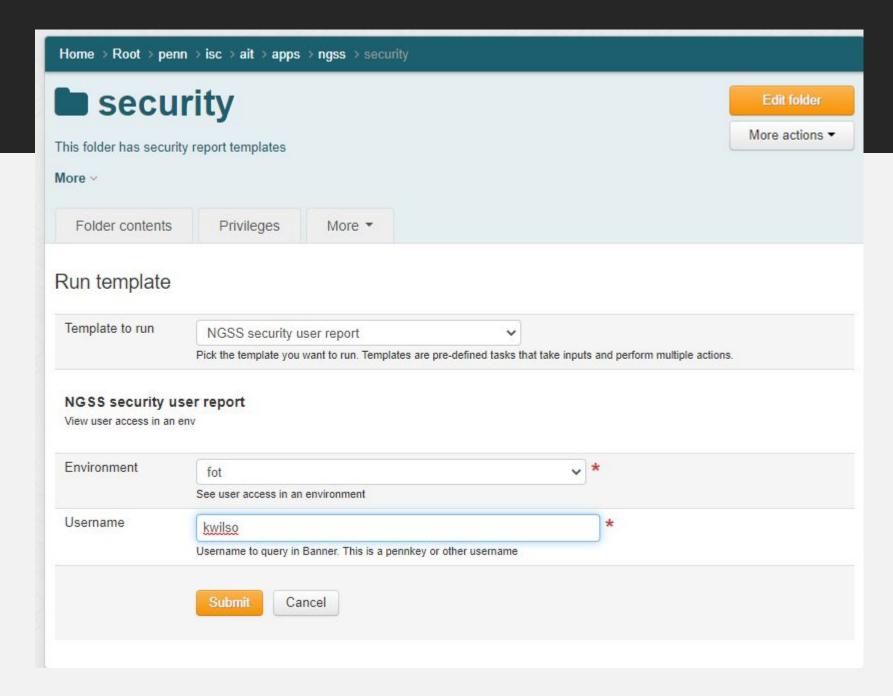
1	Α	В	C	D	E	F	G
1	Group name	UP_FA_SFS_SYSTEM_SUPPORT_G	UP_FA_SFS_SENIOR_MGMT_G	UP_FA_SFS_MANAGEMENT_G	UP_FA_COUNSELORS_G	UP_FA_SRFS_ACCOUNTING_MGR_G	UP_FA_ONE_STOP_G
2	PFAthLia:PFAthLiaAdmin	X	x				
3	PFAthLia:PFAthLiaAllowed						
4	PFAudit:PFAuditAdmin	X	x				
5	PFAudit:PFAuditAllowed	X		x	X		
6	PFAwardConfig:PFAwardConfigAdmin	x	x				
7	PFAwardConfig:PFAwardConfigAllowed	x		x			
8	PFCline:PFClineAllowed		x	X	X		
9	PFDocUp:PFDocUpAdmin	x	x				
10	PFDocUp:PFDocUpAllowed						
11	PFDocUp:PFDocUpProxy	x	x	x	X		X
	PFFaar:PFFaarAdmin	x	x				
13	PFFaar:PFFaarAllowed	x	x	x	X		X
14	PFFaar:PFFaarProxy	x	X	X	X		
-	PFFisap:PFFisapAdmin	x					
	PFFisap:PFFisapAllowed		x			х	
-	PFFundsMgmt:PFFundsMgmtAdmin	x	x				
	PFFundsMgmt:PFFundsMgmtAllowed		x	x		х	
1	PFGloPro:PFGloProAdmin	x		x			
20	PFGloPro:PFGloProAllowed		x	X	X		
21	PFIRule:PFIRuleAdmin	x	x				
22	PFIRule:PFIRuleAllowed	x					
23	PFIRule:PFIRuleTesting	x	x	х			
	PFLoan:PFLoanAdmin	x	x				
-	PFLoan:PFLoanAllowed				X		X
	PFLoan:PFLoanStaff			Х	X		
200	PFPimt:PFPimtAdmin	x	x	460			
	PFPimt:PFPimtAllowed						
-	PFPimt:PFPimtProxyUser	x	X				
	PFPimt:PFPimtUnrestricted		X	Х	X		
200	PFProf:PFProfAdmin	x	x	X			
	PFPudd:PFPuddAllowed	X	X				
200	PFPudd:PFPuddTesting	X	X	X	X		
	PFTax:PFTaxAdmin	X	X	X			
	PFTax:PFTaxAllowed	1657	1.7	X	X		





```
Success: added to 'pfcline:pfclineallowed' Banner group: 'up fa counselors g'
Success: added to 'pfdocup:pfdocupadmin' Banner group: 'up fa data management g'
Success: added to 'pfpimt:pfpimtproxyuser' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfglopro:pfgloproallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pffaar:pffaarallowed' Banner group: 'up fa counselors g'
Success: added to 'pffaar:pffaarproxy' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfirule:pfiruleallowed' Banner group: 'up fa data management g'
Success: added to 'pamatch:pamatchallowed' Banner group: 'up fa counselors g'
Success: added to 'pfpudd:pfpuddtesting' Banner group: 'up fa counselors g'
Success: added to 'pffisap:pffisapallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfpimt:pfpimtunrestricted' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pftax:pftaxallowed' Banner group: 'up fa counselors g'
Success: added to 'pgmatch:pgmatchtesting' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfdocup:pfdocupproxy' Banner group: 'up fa data management g'
Success: added to 'pfpudd:pfpuddallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfprof.pfprofadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfirule:pfiruletesting' Banner group: 'up fa data management g'
Success: added to 'pfloan:pfloanallowed' Banner group: 'up fa data management g'
Success: added to 'pfdocup:pfdocupproxy' Banner group: 'up fa one stop g'
Success: added to 'pgmatch:pgmatchtesting' Banner group: 'up_fa_data_management_g'
Success: added to 'pfloan:pfloanallowed' Banner group: 'up fa one stop g'
Success: added to 'pfdocup:pfdocupproxy' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfirule:pfiruletesting' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfawardconfig:pfawardconfigadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgiob:pgioballowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfdocup:pfdocupproxy' Banner group: 'up fa counselors g'
Success: added to 'pfloan:pfloanallowed' Banner group: 'up fa counselors g'
Success: added to 'pfaudit:pfauditadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfpimt:pfpimtadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pftax:pftaxallowed' Banner group: 'up fa data management g'
Success: added to 'pfathlia:pfathliaadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfvet:pfvetadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgjob:pgjoblog' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgmatch:pgmatchtesting' Banner group: 'up fa counselors g'
Success: added to 'pfpimt:pfpimtunrestricted' Banner group: 'up fa counselors g'
Success: added to 'pfloan:pfloanstaff' Banner group: 'up fa counselors g'
Success: added to 'pfpudd:pfpuddtesting' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pffaar:pffaarallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pffaar:pffaarproxy' Banner group: 'up fa counselors g'
Success: added to 'pgmatch:pgmatchallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pffaar:pffaarallowed' Banner group: 'up fa one stop g'
Success: added to 'pfglopro:pfgloproallowed' Banner group: 'up fa counselors g'
Success: added to 'pfloan:pfloanadmin' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgmatch:pgmatchpidover' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgfeeder:uploaduser' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfcline:pfclineallowed' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pgmatch:pgmatchallowed' Banner group: 'up fa data management g'
Success: added to 'pgfeeder:uploadapprover' Banner group: 'up fa sfs senior mgmt g'
Success: added to 'pfaudit:pfauditallowed' Banner group: 'up fa counselors g'
```

## Banner security user report



# Banner security user report

#### NGSS user security report for env fot user KWILSO



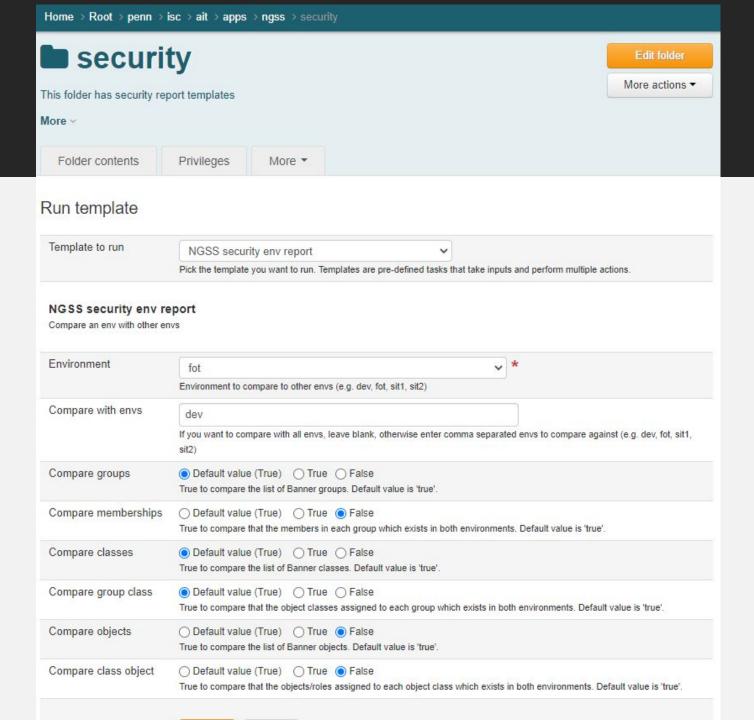
#### donotreply@isc.upenn.edu

Wed 7/14/2021 1:33 PM To: Hyzer, Chris

Access in env fot for user: KWILSO

Group	: Class	: ObjectRole
- UP_AR_SYSTEMS_G	: UP_AR_ADVANCE_QUERY_C	: TGIACCDM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: SOAHOLDQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: SOQHOLDQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TGACOMCQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TGISTMTQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSAACCTQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSAAREVQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSADETCQ
→ UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSADETLQ
L UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSAEXPPQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSAEXPTQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSARFNDM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSATAXNQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSIAPPLM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSIAUTHQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSICSRVM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSIEXPTM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSIQACTM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSITAXNQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSQCONTQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSQEXPTQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TSRSSUMM
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TVAAUTHQ
- UP_AR_SYSTEMS_G	: UP_AR_STANDARD_QUERY_C	: TVVAUTHQ
- UP_AR_SYSTEMS_G	: UP_AR_SYSTEM_SUPPORT_C	: TGACSPVM
- UP_AR_SYSTEMS_G	: UP_AR_SYSTEM_SUPPORT_C	: TGRAGESM
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAJBMOM
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAJLISM
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAJOBSQ
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAJPRFQ
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAPCTLM
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAPDFTM
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJAPVALQ
- UP_AR_SYSTEMS_G	: UP_GN_COMMONSYS_C	: GJARSLTM
UP 15 CHETTING C	UB CU CONNENCT C	6545005

## Banner security env compare

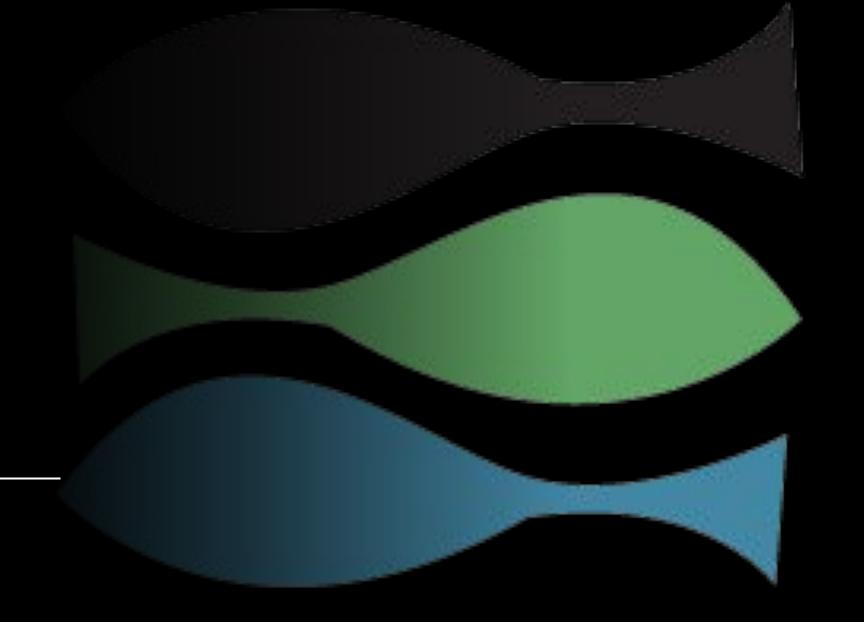


## Banner security env compare

```
NGSS security report for env fot
     UP_FA_VEKIFICATION_MAINI_C, UP_FA_VEKIFICATION_QUEKY_C, UP_GN_ADDITIONAL_C, UP_GN_BATCH_JUBS_C, UP_GN_BATCH_JUBS_TEMP_C, UP_GN_COMP
     UP_ST_ACCT_MAINT_M_C, UP_ST_ADMIN_MT_M_C, UP_ST_ADMIN_MT_Q_C, UP_ST_ADMISSIONS_M_C, UP_ST_COMMUNICATION_M_C, UP_ST_COMMUNICATION_Q
     UP_ST_FINAID_Q_C, UP_ST_GEN_VAL_CNT_FORMS_M_C, UP_ST_GEN_VAL_CNT_FORMS_Q_C, UP_ST_GN_POP_SEL_M_C, UP_ST_GN_RPTS_PROC_M_C, UP_ST_MIS
     UP_ST_MT_ST_SCH_REG_M_C, UP_ST_NSCL_M_C, UP_ST_OUR_SR_MANAGEMENT_G, UP_ST_POPSEL_LTR_GEN_M_C, UP_ST_PRG_MT_M_C, UP_ST_RECORD_REQ_M_
     UP_ST_TERM_CONF_Q_C, UP_ST_TRANSCRIPTS, UP_ST_VW_PERSON_Q_C, UP_TUITION_FEE_TESTING_Q_C
       - dev : extra object classes: BAN_CM_GOREMAL_C, UP_DEV_C, UP_GN_JOBS_C, UP_IT_DEVELOPER, UP_SEC_TEST, UP_SR_BATCH_JOBS_C
     Group/class report (for groups in both envs) comparing to 'fot':
                                              : missing classes: UP_FA_SRQUERY_C
      - dev : UP AR SA MGMT G
       - dev : UP_FA_BATCH_JOBS G
                                             : missing classes: UP_FA_BATCH_JOBS2_C
                                              : extra classes: UP_FAJOBS_REPORTS_C, UP_FA_CORRECTION PROCESSING C
       - dev : UP_FA_BATCH_USER_G
       - dev : UP_FA_CASHIER_G
                                              : missing classes: UP_GN_COMMONSYS_C
       - dev : UP_FA_DIRECTOR_G
                                              : extra classes: BAN_FINAID_C, UP_FA_BATCH_JOBS, UP_TMP_ALL_BATCH_JOBS_CUSTOM_C
      - dev : UP GN_JOBS_G
                                              : extra classes: UP_GN_JOBS_C
      - dev : UP GN SSN QUERY G
                                              : missing classes: UP_GN_COMMONSYS, UP_GN_SSN_QUERY_C , UP_ST_GEN_VAL_CNT_FORMS_Q C, UP_
      - dev : UP GN SYSTEM CONFIG G
                                              : missing classes: UP FA SRQUERY C
      - dev : UP ST_BATCH_JOBS_G
                                              : missing classes: UP_ST_GN_POP_SEL_M_C, UP_ST_GN_RPTS_PROC_M_C
      - dev : UP ST REGISTRAR G
                                              : extra classes: UP_STUDENT_COPY_C, UP_ST_SECT_MAINT_M_C, UP_TMP_ALL_BATCH_JOBS_CUSTON
       - dev : UP ST SR MGMT G
                                              : extra classes: UP_GN_COMMONSYS_C, UP_ST_GENPERSON_QUERY_C, UP_ST_GENSTU_QUERY_C, UP_
       - dev : UP_ST_SR_STAFF_G
                                              : extra classes: UP GN_COMMONSYS_C, UP_ST_GENPERSON_QUERY_C, UP_ST_GENSTU_QUERY_C, UP_
      - dev : groups with correct classes : UP AR ACCOUNTING G, UP AR BATCH JOBS G, UP AR CALL CENTER G, UP AR COLLECTIONS G, UP A
     UP GN PSWD G, UP GN SECURITY ADMIN G, UP GN SYSTEM SUPPORT G, UP GN SYSTEM TECH SUPPORT G, UP PENNANT AID G
```

### Wharton GSH template

• Jim Denk



Done!