


Grouper Custom UI example at Penn MFA and O365

Wiki Home	Grouper Release Announcements	Grouper Guides	Grouper Deployment Guide	Community Contributions	Internal Developer Resources
---------------------------	---	--------------------------------	--	---	--

 For more general information, see [Grouper Custom UI Examples](#)

Requirements

- Set up a group that people can enroll or unenroll in to test their MFA with O365
- Only allow people to use this who have a date in the future where they will be required
- Dont allow people already required to be able to unenroll
- Show if the assignment is provisioned into Azure (if the MFA is enabled)
- Show if the assignment is provisioned into LDAP from PSPNG (intermediary destination, then it flows from LDAP/AD into Azure)
- Require the user be in MFA, and if not, give a link to enroll
- Require the user have an O365 mailbox, and if not, notify the user
- Managers (readers and updaters) should be able to check on a user, see why their access is not correct, and enroll or unenroll them
- Emails should be sent to users when they enroll or unenroll (or a manager does it for them) so they have information about unenrolling or re-enrolling later

User variables

User environment

Environment	Result	Description	Variable name	Type	Operation	For logged in user
In PennGroup for Two-Step Verification in PennO365 (required or self-enrolled)	Yes	Member of group o365_two_step_prod (policy)	cu_o365twoStepEnrolled	boolean	Grouper	No
Self-enrolled in PennO365 Two-Step Verification	Yes	Member of group o365twoStepSelfEnrolled	cu_o365twoStepSelfEnrolled	boolean	Grouper	No
Allowed to enroll or unenroll since has a future deadline	Yes	Has privileges Optin , Optout of group o365twoStepSelfEnrolled	cu_o365twoStepCanEnrollUnenroll	boolean	Grouper	No
Required to enroll because org was required in past	No	Member of group o365_two_step_prod_policy	cu_o365twoStepRequiredToEnroll	boolean	Grouper	No
Date required to enroll	2020/05/14	Query: select min(value_string) from authz_o365_twostep_req_date_v where subject_id = ?	cu_o365twoStepRequiredDate	string	SQL	No
In O365 Azure (final data flow destination) means Two-Step on for O365	Yes	User in group o365_two_step_prod (policy) in Azure (pennAzure)	cu_o365twoStepInAzure	boolean	Azure	No
Is there an error checking Azure O365?	No		cu_o365twoStepInAzureError	boolean	Azure	
In One AD LDAP (intermediary data flow destination)	<blank>	Group o365_two_step_prod (policy) in LDAP filter: (&(objectclass=user)(employeeID=\${subject.getid()}) (memberof=CN=\${group.getName()},OU=Grouper,OU=365Groups,DC=one,DC=upenn,DC=edu))	cu_o365twoStepInLdap	boolean	LDAP	No
Is there an error checking One AD?	Yes		cu_o365twoStepInLdapError	boolean	LDAP	
O365 mailbox	Yes	Member of group o365hasMailbox	cu_o365hasMailbox	boolean	Grouper	No
Two-Step Verification	Yes	Member of group twoStepUsers	cu_twoStepUsers	boolean	Grouper	No
Manager of PennO365 Two-Step self enrollments	Yes	Has privileges Read , Update of group o365twoStepSelfEnrolled	cu_o365twoStepAllowedToManage	boolean	Grouper	Yes
On O365 Two-Step team	Yes	Member of group o365twoStepTeam	cu_o365twoStepTeam	boolean	Grouper	Yes

Configuration

```
{
  "variableToAssign": "cu_o365twoStepTeam",
  "userQueryType": "grouper",
  "groupName": "penn:isc:ait:apps:O365:o365twoStepTeam",
}
```

```

"label": "On 0365 Two-Step team",
"order": 110,
"forLoggedInUser": true
}
{
"variableToAssign": "cu_o365twoStepEnrolled",
"fieldNames": "members",
"userQueryType": "grouper",
"variableType": "boolean",
"groupName": "penn:isc:ait:apps:0365:twoStepProd:o365_two_step_prod",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepEnrolled']}",
"order": 10
}
{
"variableToAssign": "cu_o365twoStepSelfEnrolled",
"fieldNames": "members",
"userQueryType": "grouper",
"variableType": "boolean",
"groupName": "penn:isc:ait:apps:0365:twoStepProd:simpleEnrollUnenroll:o365twoStepSelfEnrolled",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepSelfEnrolled']}",
"order": 20
}
{
"variableToAssign": "cu_o365twoStepCanEnrollUnenroll",
"fieldNames": "optins,optouts",
"userQueryType": "grouper",
"variableType": "boolean",
"groupName": "penn:isc:ait:apps:0365:twoStepProd:simpleEnrollUnenroll:o365twoStepSelfEnrolled",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepCanEnrollUnenroll']}",
"order": 30
}
{
"variableToAssign": "cu_o365twoStepRequiredToEnroll",
"fieldNames": "members",
"userQueryType": "grouper",
"variableType": "boolean",
"groupName": "penn:isc:ait:apps:0365:twoStepProd:o365_two_step_prod_policy",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepRequiredToEnroll']}",
"order": 40
}
{
"variableToAssign": "cu_o365twoStepRequiredDate",
"bindVar0": "${subject.id}",
"userQueryType": "sql",
"variableType": "string",
"configId": "grouper",
"bindVar0type": "string",
"query": "select min(value_string) from authz_o365_twostep_req_date_v where subject_id = ?",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepRequiredDate']}",
"order": 50
}
{
"variableToAssign": "cu_o365twoStepInAzure",
"userQueryType": "azure",
"configId": "pennAzure",
"variableToAssignOnError": "cu_o365twoStepInAzureError",
"groupName": "penn:isc:ait:apps:0365:twoStepProd:o365_two_step_prod",
"label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepInAzure']}",
"errorLabel": "${textContainer.text['penn_o365twoStep_cu_o365twoStepInAzureError']}",
"order": 60
}
{
"variableToAssign": "cu_o365hasMailbox",
"userQueryType": "grouper",
"groupName": "penn:isc:ait:apps:0365:o365hasMailbox",
"label": "${textContainer.text['penn_o365twoStep_cu_o365hasMailbox']}",
"order": 80
}
{
"variableToAssign": "cu_twoStepUsers",
"fieldNames": "members",

```

```

    "userQueryType": "grouper",
    "variableType": "boolean",
    "groupName": "penn:community:authentication:twoStepUsers",
    "label": "${textContainer.text['penn_o365twoStep_cu_twoStepUsers']}",
    "order": 90
  }
  {
    "variableToAssign": "cu_o365twoStepInLdap",
    "userQueryType": "ldap",
    "variableToAssignOnError": "cu_o365twoStepInLdapError",
    "groupName": "penn:isc:ait:apps:0365:twoStepProd:o365_two_step_prod",
    "label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepInLdap']}",
    "errorLabel": "${textContainer.text['penn_o365twoStep_cu_o365twoStepInLdapError']}",
    "order": 70,
    "configId": "oneProdAd"
  }
  {
    "variableToAssign": "cu_o365twoStepAllowedToManage",
    "fieldNames": "updaters,readers",
    "userQueryType": "grouper",
    "variableType": "boolean",
    "groupName": "penn:isc:ait:apps:0365:twoStepProd:simpleEnrollUnenroll:o365twoStepSelfEnrolled",
    "label": "${textContainer.text['penn_o365twoStep_cu_o365twoStepAllowedToManage']}",
    "order": 100,
    "forLoggedInUser": true
  }
  {
    "variableToAssign": "default",
    "ldapSearchDn": "DC=one,DC=upenn,DC=edu",
    "ldapFilter": "(&(objectclass=user)(employeeID=${subject.getId()})(memberof=CN=${group.getName()},OU=Grouper,OU=365Groups,DC=one,DC=upenn,DC=edu))",
    "ldapAttributeToRetrieve": "employeeID"
  }
}

```

Text configuration

All screen text

Text type	Rule index	Expression	Expression result	Configured text	Evaluated text	Default	End if matche
emailBccGroupName	0		Yes	penn:isc:ait:apps:O365:twoStepProd:simpleEnrollUnenroll:o365twoStepAllowedToAdmin	penn:isc:ait:apps:O365:twoStepProd:simpleEnrollUnenroll:o365twoStepAllowedToAdmin		Yes
canSeeUserEnvironment	0		Yes	\$(cu_o365twoStepAllowedToManage)	true		Yes
canSeeScreenState	0		Yes	false	false		Yes
canAssignVariables	0		Yes	\$(cu_o365twoStepTeam)	true		Yes
emailBody	0	\$(cu_grouperEnroll)	No	\$(textContainer.text['penn_o365twoStep_enroll_emailBody'])	Dear Chris Hyzer, Thank you for enrolling in Two-Step Verification for PennO365. When you log in to PennO365 using your Microsoft account, you will be routinely prompted for a single-use verifica... more		Yes
emailBody	10	\$(tcu_grouperEnroll)	Yes	\$(textContainer.text['penn_o365twoStep_unenroll_emailBody'])	Dear Chris Hyzer, You have unenrolled from Two-Step Verification for PennO365. When you log in to PennO365 using your Microsoft account you will no longer be routinely prompted for a single-use v... more		Yes
emailSubject	0		Yes	\$(cu_grouperEnroll ? textContainer.text['penn_o365twoStep_enroll_emailSubject'] : textContainer.text['penn_o365twoStep_unenroll_emailSubject'])	Penn Two-Step Verification - you have unenrolled from Two-Step Verification for PennO365		Yes
emailToUser	0		Yes	true	true		
instructions1	10	\$(tcu_o365twoStepRequiredToEnroll)	No	\$(textContainer.text['penn_o365twoStep_instructions_requiredToEnroll'])	To improve Penn's data security, you are required to use Two-Step Verification with O365. 		Yes
instructions1	20	\$(tcu_o365twoStepRequiredToEnroll && cu_o365twoStepEnrolled && cu_o365hasMailbox && cu_o365twoStepCanEnrollUnenroll)	Yes	\$(textContainer.text['penn_o365twoStep_instructions_willBeRequiredToEnroll'])	To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on 2020/05/14</br>. 		Yes
instructions1	30	\$(tcu_o365twoStepRequiredToEnroll && tcu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && tcu_twoStepUsers)	No	\$(textContainer.text['penn_o365twoStep_instructions_needsTwoStep'])	You are not enrolled in Two-Step Verification. Enroll now. 		Yes
instructions1	40	\$(tcu_o365twoStepRequiredToEnroll && tcu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && tcu_o365hasMailbox)	No	\$(textContainer.text['penn_o365twoStep_instructions_needsO365'])	You need an O365 account. 		Yes
instructions1	50	\$(tcu_o365twoStepRequiredToEnroll && tcu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && tcu_twoStepUsers && cu_o365hasMailbox)	No	\$(textContainer.text['penn_o365twoStep_instructions_notEnrolledButCanEnroll'])	To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 by 2020/05/14</br>. Enroll now to ensure that you're not locked out of email and other O365 serv... more		Yes
instructions1	60	\$(tcu_o365twoStepRequiredToEnroll)	Yes	\$(textContainer.text['penn_o365twoStep_instructions_notRequiredCannotEnroll'])	You are not required to enroll, and you are not allowed to enroll. 		Yes
managerInstructions	0	\$(cu_o365twoStepAllowedToManage)	Yes	\$(textContainer.text['penn_o365twoStep_instructions_manager'])	View status of users in Two-Step Verification with O365. Enroll or unenroll users if applicable. You will see what the user sees below when you pull up a user. 		Yes
enrollmentLabel	0	\$(tcu_o365twoStepEnrolled && cu_o365twoStepInAzureError)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledErrorInAzure'])	Enrollment status: <b style="color: red; font-size: 120%;">Not enrolled in this system but an error occurred checking your enrollment in O365.		Yes
enrollmentLabel	10	\$(tcu_o365twoStepEnrolled && tcu_o365twoStepInAzure)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_notEnrolled'])	Enrollment status: <b style="color: red; font-size: 120%;">Not enrolled.		Yes
enrollmentLabel	20	\$(tcu_o365twoStepEnrolled && (cu_o365twoStepInLdapError cu_o365twoStepInLdap) && cu_o365twoStepInAzure)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledPendingInLdapAndAzure'])	Enrollment status: <b style="color: brown; font-size: 120%;">Pending to be unenrolled. Generally takes less than 1 hour.		Yes
enrollmentLabel	30	\$(tcu_o365twoStepEnrolled && cu_o365twoStepInAzure)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledPendingNotInLdapButInAzure'])	Enrollment status: <b style="color: brown; font-size: 120%;">Pending to be unenrolled. Generally takes less than 15 minutes.		Yes
enrollmentLabel	40	\$(tcu_o365twoStepEnrolled && cu_o365twoStepInAzureError)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_enrolledErrorInAzure'])	Enrollment status: <b style="color: brown; font-size: 120%;">Enrolled in this system but an error occurred checking your enrollment in O365.		Yes
enrollmentLabel	50	\$(tcu_o365twoStepEnrolled && cu_o365twoStepInAzure)	Yes	\$(textContainer.text['penn_o365twoStep_enrollLabel_enrolled'])	Enrollment status: <b style="color: green; font-size: 120%;">Enrolled.		Yes
enrollmentLabel	60	\$(tcu_o365twoStepEnrolled && (cu_o365twoStepInLdapError tcu_o365twoStepInLdap) && tcu_o365twoStepInAzure)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_enrolledPendingInLdapAndAzure'])	Enrollment status: <b style="color: brown; font-size: 120%;">Pending. Generally takes less than 1 hour.		Yes
enrollmentLabel	70	\$(tcu_o365twoStepEnrolled && tcu_o365twoStepInAzure)	No	\$(textContainer.text['penn_o365twoStep_enrollLabel_enrolledPendingNotInLdapButInAzure'])	Enrollment status: <b style="color: brown; font-size: 120%;">Pending. Generally takes less than 15 minutes.		Yes
enrollButtonShow	0	\$(tcu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && cu_o365hasMailbox)	Yes		false		Yes
enrollButtonText	0		Yes	\$(textContainer.text['penn_o365twoStep_enrollButtonText'])	Enroll		Yes
unenrollButtonShow	0	\$(cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && tcu_o365twoStepRequiredToEnroll)	Yes		true		Yes
unenrollButtonText	0		Yes	\$(textContainer.text['penn_o365twoStep_unenrollButtonText'])	Unenroll		Yes

Configuration

```
{
  "endIfMatches": true,
  "customUiTextType": "canAssignVariables",
  "index": 0,
  "text": "${cu_o365twoStepTeam}"
}
{
  "customUiTextType": "emailToUser",
  "index": 0,
  "text": "true"
}
{
  "endIfMatches": true,
  "customUiTextType": "emailSubject",
  "index": 0,
  "text": "${cu_grouperEnroll ? textContainer.text['penn_o365twoStep_enroll_emailSubject'] : textContainer.text
```

```

['penn_o365twoStep_unenroll_emailSubject']] "
}
{
  "endIfMatches":true,
  "customUiTextType":"emailBody",
  "index":10,
  "text":"${textContainer.text['penn_o365twoStep_unenroll_emailBody']}",
  "script":"${!cu_grouperEnroll}"
}
{
  "endIfMatches":true,
  "customUiTextType":"emailBody",
  "index":0,
  "text":"${textContainer.text['penn_o365twoStep_enroll_emailBody']}",
  "script":"${cu_grouperEnroll}"
}
{
  "endIfMatches":true,
  "customUiTextType":"canSeeUserEnvironment",
  "index":0,
  "text":"${cu_o365twoStepAllowedToManage}"
}
{
  "endIfMatches":true,
  "customUiTextType":"canSeeScreenState",
  "index":0,
  "text":"false"
}
{
  "endIfMatches":true,
  "customUiTextType":"emailBccGroupName",
  "index":0,
  "text":"penn:isc:ait:apps:O365:twoStepProd:simpleEnrollUnenroll:o365twoStepAllowedToAdmin"
}
{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":60,
  "text":"${textContainer.text['penn_o365twoStep_instructions_notRequiredCannotEnroll']}",
  "script":"${!cu_o365twoStepRequiredToEnroll}"
}
{
  "endIfMatches":true,
  "customUiTextType":"unenrollButtonShow",
  "index":0,
  "text":"${cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && !cu_o365twoStepRequiredToEnroll}"
}
{
  "endIfMatches":true,
  "customUiTextType":"enrollButtonShow",
  "index":0,
  "text":"${!cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll && cu_twoStepUsers && cu_o365hasMailbox}"
}
{
  "endIfMatches":true,
  "customUiTextType":"managerInstructions",
  "index":0,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_manager']}",
  "script":"${cu_o365twoStepAllowedToManage}"
}
{
  "endIfMatches":true,
  "customUiTextType":"unenrollButtonText",
  "index":0,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_unenrollButtonText']}"
}
{
  "endIfMatches":true,

```

```

"customUiTextType": "enrollButtonText",
"index": 0,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollButtonText']}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 70,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_enrolledPendingNotInLdapButInAzure']}",
"script": "${cu_o365twoStepEnrolled && !cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 60,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_enrolledPendingInLdapAndAzure']}",
"script": "${cu_o365twoStepEnrolled && (cu_o365twoStepInLdapError || !cu_o365twoStepInLdap) && !
cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 50,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_enrolled']}",
"script": "${cu_o365twoStepEnrolled && cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 40,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_enrolledErrorInAzure']}",
"script": "${cu_o365twoStepEnrolled && cu_o365twoStepInAzureError}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 30,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledPendingNotInLdapButInAzure']}",
"script": "${!cu_o365twoStepEnrolled && cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 20,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledPendingInLdapAndAzure']}",
"script": "${!cu_o365twoStepEnrolled && (cu_o365twoStepInLdapError || cu_o365twoStepInLdap) &&
cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 10,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_notEnrolled']}",
"script": "${!cu_o365twoStepEnrolled && !cu_o365twoStepInAzure}"
}
{
"endIfMatches": true,
"customUiTextType": "enrollmentLabel",
"index": 0,
"defaultText": false,
"text": "${textContainer.text['penn_o365twoStep_enrollLabel_notEnrolledErrorInAzure']}",
"script": "${!cu_o365twoStepEnrolled && cu_o365twoStepInAzureError}"
}

```

```

{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":50,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_notEnrolledButCanEnroll']}",
  "script":"${!cu_o365twoStepRequiredToEnroll && !cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll &&
cu_twoStepUsers && cu_o365hasMailbox}"
}
{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":40,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_needsO365']}",
  "script":"${!cu_o365twoStepRequiredToEnroll && !cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll &&
!cu_o365hasMailbox}"
}
{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":30,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_needsTwoStep']}",
  "script":"${!cu_o365twoStepRequiredToEnroll && !cu_o365twoStepEnrolled && cu_o365twoStepCanEnrollUnenroll &&
!cu_twoStepUsers}"
}
{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":20,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_willBeRequiredToEnroll']}",
  "script":"${ !cu_o365twoStepRequiredToEnroll && cu_o365twoStepEnrolled && cu_o365hasMailbox &&
cu_o365twoStepCanEnrollUnenroll}"
}
{
  "endIfMatches":true,
  "customUiTextType":"instructions1",
  "index":10,
  "defaultText":false,
  "text":"${textContainer.text['penn_o365twoStep_instructions_requiredToEnroll']}",
  "script":"${cu_o365twoStepRequiredToEnroll}"
}
{
  "customUiTextType":"helpLink",
  "defaultText":true,
  "text":"${textContainer.text['penn_o365twoStep_helplink']}"
}
{
  "customUiTextType":"header",
  "defaultText":true,
  "text":"${textContainer.text['penn_o365twoStep_header']}"
}
}

```

grouper.text.en.us.properties

```

#####
## Custom UI for O365 two step
#####

# header for o365 two step custom ui
penn_o365twoStep_header = <h1>PennO365 Two-Step Verification</h1>

penn_o365twoStep_helplink = <a href="https://www.isc.upenn.edu/how-to/penno365-office-365-proplus"
>${textContainer.text['grouper.help']} </a>

# top line for managers
penn_o365twoStep_instructions_manager = View status of users in Two-Step Verification with O365.  Enroll or
unenroll users if applicable.<br /><br />You will see what the user sees below when you pull up a user<br /><br />

```

```

/>

# if required to enroll, cannot opt in or opt out
penn_o365twoStep_instructions_requiredToEnroll = To improve Penn's data security, you are required to use Two-
Step Verification with O365.<br /><br />

# not required, will be required, and in two step and has o365 mailbox
penn_o365twoStep_instructions_willBeRequiredToEnroll = To improve Penn's data security, you will be required to
enroll in Two-Step Verification for O365 on <b>${cu_o365twoStepRequiredDate}</b>.<br /><br />

# not require, not allowed
penn_o365twoStep_instructions_notRequiredCannotEnroll = You are not required to enroll, and you are not allowed
to enroll.<br /><br />

# not in two step
penn_o365twoStep_instructions_needsTwoStep = You are not enrolled in Two-Step Verification. <a href="
https://twostep.apps.upenn.edu/twoFactor/twoFactorUi/app/UiMain.index">Enroll now</a>.<br /><br />

# not in o365
penn_o365twoStep_instructions_needsO365 = You need an O365 account.<br /><br />

# can enroll, not enrolled, not required
penn_o365twoStep_instructions_notEnrolledButCanEnroll = To improve Penn's data security, you will be required
to enroll in Two-Step Verification for O365 by <b>${cu_o365twoStepRequiredDate}</b>. Enroll now to ensure that
you're not locked out of email and other O365 services. <br /><br />You must enroll for O365 even if you are
already enrolled in Two-Step Verification for Penn WebLogin (PennKey).<br /><br />

# not enrolled, cant check azure
penn_o365twoStep_enrollLabel_notEnrolledErrorInAzure = <b>Enrollment status:</b> <b style="color: red; font-
size: 120%">Not enrolled in this system but an error occurred checking your enrollment in O365</b>

# not enrolled
penn_o365twoStep_enrollLabel_notEnrolled = <b>Enrollment status:</b> <b style="color: red; font-size: 120%">Not
enrolled</b>

# not enrolled but yes in ldap and azure
penn_o365twoStep_enrollLabel_notEnrolledPendingInLdapAndAzure = <b>Enrollment status:</b> <b style="color:
brown; font-size: 120%">Pending to be unenrolled. Generally takes less than 1 hour.</b>

# not enrolled but still in azure
penn_o365twoStep_enrollLabel_notEnrolledPendingNotInLdapButInAzure = <b>Enrollment status:</b> <b style="\
color: brown; font-size: 120%">Pending to be unenrolled. Generally takes less than 15 minutes.</b>

# enrolled, cant check azure
penn_o365twoStep_enrollLabel_enrolledErrorInAzure = <b>Enrollment status:</b> <b style="\color: brown; font-
size: 120%">Enrolled in this system but an error occurred checking your enrollment in O365</b>

# enrolled
penn_o365twoStep_enrollLabel_enrolled = <b>Enrollment status:</b> <b style="\color: green; font-size: 120%"
>Enrolled</b>

# enrolled but not in ldap or azure
penn_o365twoStep_enrollLabel_enrolledPendingInLdapAndAzure = <b>Enrollment status:</b> <b style="\color: brown;
font-size: 120%">Pending. Generally takes less than 1 hour.</b>

# enrolled but still not in azure
penn_o365twoStep_enrollLabel_enrolledPendingNotInLdapButInAzure = <b>Enrollment status:</b> <b style="\color:
brown; font-size: 120%">Pending. Generally takes less than 15 minutes.</b>

penn_o365twoStep_enrollButtonText = Enroll

penn_o365twoStep_unenrollButtonText = Unenroll

penn_o365twoStep_enroll_emailBody = Dear ${subject.getName()}, $newline$ $newline$ Thank you for enrolling in Two-
Step Verification for PennO365. $newline$ $newline$ When you log in to PennO365 using your Microsoft account, you
will be routinely prompted for a single-use verification code. $newline$ $newline$ You can accept push
notifications or generate codes on your phone using Duo Mobile. Make sure you also print out single-use
verification codes in case you don't have access to that device (on the "Manage settings" page, click "Generate
codes") $newline$ $newline$ Remember to keep your profile updated with backup phone numbers (to which single-use
codes can be sent) and friends you can authorize to retrieve a code if all else fails. $newline$ $newline$ For
more information about Two-Step Verification, see: http://upenn.edu/twostep$ $newline$ $newline$ The Penn Two-Step

```


Support team\$newline\$\$newline\$For technical assistance with Two-Step Verification, contact the IT support staff of your school or center. If you are unsure whom to contact, visit the Get IT Help directory: <https://www.isc.upenn.edu/get-it-help>\$newline\$\$newline\$Manage your enrollment: <https://grouper.server.school.edu/grouper/grouperUi/app/UiV2Main.indexLite?operation=UiV2GroupLite.liteGroup&groupId=61bcaad67d57438ablfeallc426c2f64>

penn_o365twoStep_enroll_emailSubject = Penn Two-Step Verification - you have enrolled in Two-Step Verification for PennO365


penn_o365twoStep_unenroll_emailBody = Dear \${subject.getName()}, \$newline\$\$newline\$You have unenrolled from Two-Step Verification for PennO365. \$newline\$\$newline\$When you log in to PennO365 using your Microsoft account you will no longer be routinely prompted for a single-use verification code. \$newline\$\$newline\$Manage your enrollment: <https://grouper.server.school.edu/grouper/grouperUi/app/UiV2Main.indexLite?operation=UiV2GroupLite.liteGroup&groupId=61bcaad67d57438ablfeallc426c2f64> \$newline\$\$newline\$For more information about Two-Step Verification, see: <http://upenn.edu/twostep> \$newline\$\$newline\$The Penn Two-Step Support team \$newline\$\$newline\$For technical assistance with Two-Step Verification, contact the IT support staff of your school or center. If you are unsure whom to contact, visit the Get IT Help directory: <https://www.isc.upenn.edu/get-it-help> \$newline\$\$newline\$Manager your enrollment: <https://grouper.server.school.edu/grouper/grouperUi/app/UiV2Main.indexLite?operation=UiV2GroupLite.liteGroup&groupId=61bcaad67d57438ablfeallc426c2f64>

penn_o365twoStep_unenroll_emailSubject = Penn Two-Step Verification - you have unenrolled from Two-Step Verification for PennO365

penn_o365twoStep_cu_o365twoStepAllowedToManage = Manager of PennO365 Two-Step self enrollments
penn_o365twoStep_cu_o365twoStepCanEnrollUnenroll = Allowed to enroll or unenroll since has a future deadline
penn_o365twoStep_cu_o365twoStepSelfEnrolled = Self-enrolled in PennO365 Two-Step Verification
penn_o365twoStep_cu_o365twoStepRequiredToEnroll = Required to enroll because org was required in past
penn_o365twoStep_cu_twoStepUsers = Two-Step Verification
penn_o365twoStep_cu_o365hasMailbox = O365 mailbox
penn_o365twoStep_cu_o365twoStepInLdap = In One AD LDAP (intermediary data flow destination)
penn_o365twoStep_cu_o365twoStepInLdapError = Is there an error checking One AD?
penn_o365twoStep_cu_o365twoStepInAzure = In O365 Azure (final data flow destination) means Two-Step on for O365
penn_o365twoStep_cu_o365twoStepInAzureError = Is there an error checking Azure O365?
penn_o365twoStep_cu_o365twoStepRequiredDate = Date required to enroll
penn_o365twoStep_cu_o365twoStepEnrolled = In PennGroup for Two-Step Verification in PennO365 (required or self-enrolled)

Screen examples

Someone who is allowed to enroll and is not enrolled



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 by **2020/05/01**. Enroll now to ensure that you're not locked out of email and other O365 services.

You must enroll for O365 even if you are already enrolled in Two-Step Verification for Penn WebLogin (PennKey).

Enrollment status: Not enrolled

[Enroll](#)



PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on 2020/05/01.

Enrollment status: **Enrolled**

[Unenroll](#)

Manager

PennO365 Two-Step Verification

View status of users in Two-Step Verification with O365. Enroll or unenroll users if applicable.

You will see what the user sees below when you pull up a user

Person name or ID:

Chris Hyzer (mchyzer, 10021368) (active) Staff - Isc-applications & Information Services - Applic

Enter an entity name or ID

Select user

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on **2020/05/14**.

Enrollment status: **Enrolled**

Unenroll

User environment

Environment	Result	Description
In PennGroup for Two-Step Verification in PennO365 (required or self-enrolled)	Yes	Member of group o365_two_step_prod (policy)
Self-enrolled in PennO365 Two-Step Verification	Yes	Member of group o365twoStepSelfEnrolled

Allowed to enroll

Someone not enrolled, but who needs MFA



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

You are not enrolled in Two-Step Verification. [Enroll now.](#)

Enrollment status: **Not enrolled**

Someone not enrolled who needs an O365 account



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

You need an O365 account.

Enrollment status: **Not enrolled**

Someone enrolled, and provisioned to LDAP/AD, but not yet provisioned to Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on **2020/05/01**.

Enrollment status: **Pending. Generally takes less than 15 minutes.**

[Unenroll](#)

Someone enrolled, but not yet provisioned to LDAP/AD or Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on **2020/05/01**.

Enrollment status: **Pending. Generally takes less than 1 hour.**

[Unenroll](#)

Someone enrolled but error checking to see if in Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 on **2020/05/01**.

Enrollment status: **Enrolled in this system but an error occurred checking your enrollment in O365**

[Unenroll](#)

Someone not enrolled in Grouper, but still in LDAP/AD and Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 by **2020/05/01**. Enroll now to ensure that you're not locked out of email and other O365 services.

You must enroll for O365 even if you are already enrolled in Two-Step Verification for Penn WebLogin (PennKey).

Enrollment status: **Pending to be unenrolled. Generally takes less than 1 hour.**

[Enroll](#)

Someone not enrolled in Grouper, and LDAP/AD is also not enrolled, but still enrolled in Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 by **2020/05/01**. Enroll now to ensure that you're not locked out of email and other O365 services.

You must enroll for O365 even if you are already enrolled in Two-Step Verification for Penn WebLogin (PennKey).

Enrollment status: **Pending to be unenrolled. Generally takes less than 15 minutes.**

Enroll

Someone not enrolled in Grouper, but there was an error checking Azure



Logged in as Katherine R Wilson · [Log out](#) · [Help](#)

PennO365 Two-Step Verification

To improve Penn's data security, you will be required to enroll in Two-Step Verification for O365 by **2020/05/01**. Enroll now to ensure that you're not locked out of email and other O365 services.

You must enroll for O365 even if you are already enrolled in Two-Step Verification for Penn WebLogin (PennKey).

Enrollment status: **Not enrolled in this system but an error occurred checking your enrollment in O365**

Enroll