

The Ark Documentation.

Admin Guide (includes all admin functionality)

This particular guide steps away from our previous “self-contained single functionality” guides because the Admin module is extremely critical to the functioning of The Ark. Everything you do in this module could have a critical affect on other components. Each functionality roles on from the next and the overall theme that you shouldn’t need to, or often want to change this functionality needs to be clear any time you think of touching this section. This is why the functionality is not even visible to anybody but the ark super user account.

Log in with your **ark super user account**. You do not need to select a study. Select the Admin Tab

The screenshot shows a web browser window for 'prod.the-ark.org.au'. At the top, there's a header with the 'Centre for Genetic Epidemiology & Biostatistics' logo and 'THE UNIVERSITY OF WESTERN AUSTRALIA'. To the right is the 'THE ARK' logo with the tagline 'OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH'. Below the header, a navigation bar has tabs for 'Study' (which is active), 'Reporting', and 'Admin'. Under 'Study', a sub-menu 'Study Details' is selected. The main content area contains a form for adding a new study. It includes fields for 'ID' (with dropdown options 1, 333, 566, 568, 572), 'Status' (dropdown 'Choose One'), 'Study Name' (text input), 'Principal Contact' (text input), 'Date of Application' (date input with calendar icon), and buttons for 'Search', 'Reset', and 'New'. Below this form is a table listing existing studies:

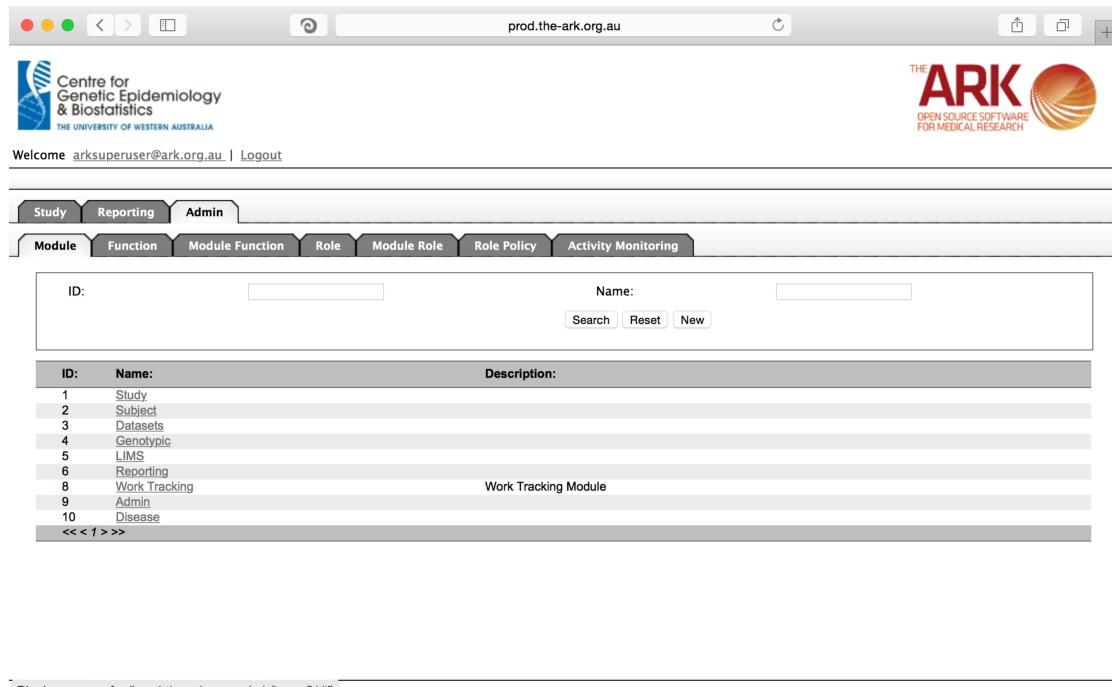
| ID: | Study Name: | Principal Contact: | Date of Application: (dd/mm/yyyy) |
|-----|--------------------|--------------------|--------------------------------------|
| 1 | Lifepool | Lisa Devereux | |
| 333 | TIG | | |
| 566 | Health Twist | | |
| 568 | PMH Demonstration | | |
| 572 | SouthWest I M Demo | Mervine Dennis | |

NOTE: Most admin functions, while available, will never be altered. The setup scripts when you create an instance of The Ark set this all up for you, and changes to this area may ultimately require further java coding changes and database changes in order to allow that functional change to occur. These facilities are mostly here so that you can see if a new instance has all that it needs in the database in order for The Ark to function.

However as a convenience we can remove certain roles, modules, etc, here. We just need to be aware that there could be downstream affects.

The most useful functions are session/activity monitoring and are useful in the realm of security and forensics.

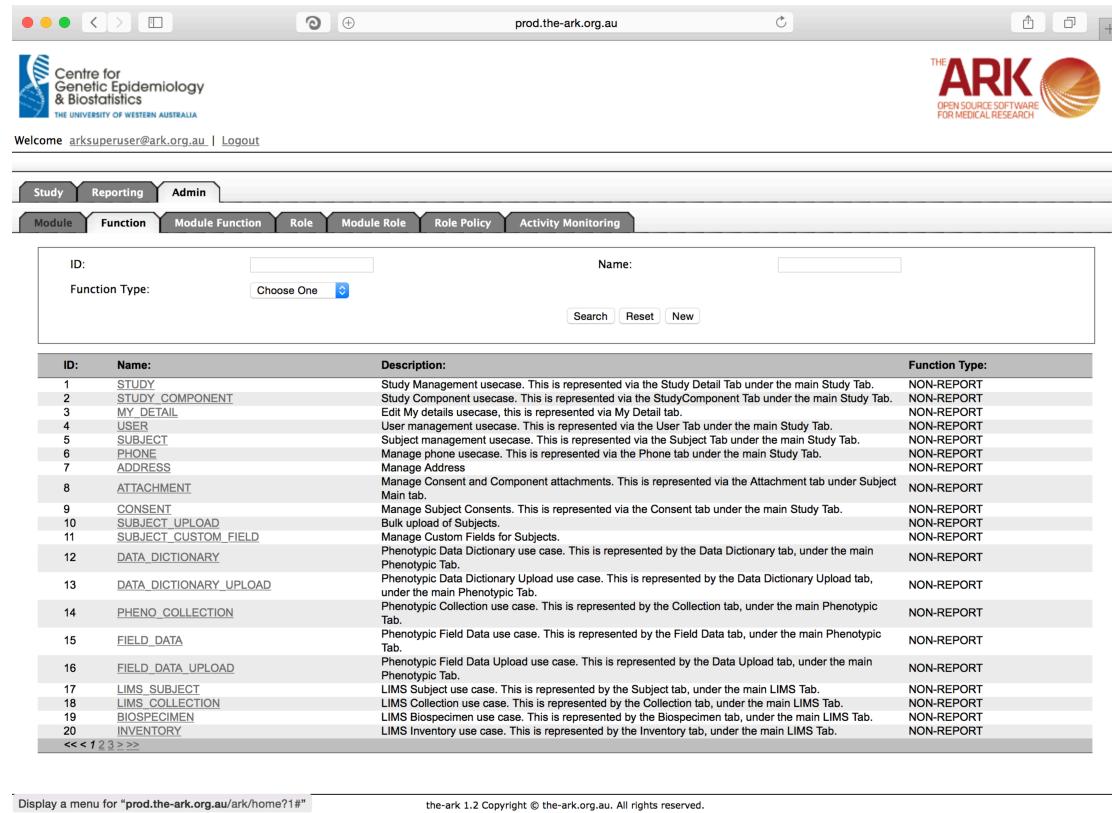
The first function highlighted is “Module”. This is a list of all available modules. We see two inactivated modules are listed here (they are in the database yet the java application logic is not active), yet they are not available now (Genotypic and Disease modules).



The screenshot shows a web-based administration interface for The Ark. At the top, there's a navigation bar with tabs for 'Study', 'Reporting', 'Admin', 'Module', 'Function', 'Module Function', 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. The 'Admin' tab is currently selected. Below the navigation bar, there's a search form with fields for 'ID:' and 'Name:', and buttons for 'Search', 'Reset', and 'New'. A table lists various modules with their IDs and names. The table has columns for 'ID.', 'Name.', and 'Description.'. The 'Name.' column lists items like 'Study', 'Subject', 'Datasets', 'Genotypic', 'LIMS', 'Reporting', 'Work Tracking', 'Admin', and 'Disease'. The 'Description.' column contains a single entry for 'Work Tracking' which is described as 'Work Tracking Module'. At the bottom of the table, there are navigation links '<< < > >>'.

| ID. | Name. | Description: |
|-----|---------------|----------------------|
| 1 | Study | |
| 2 | Subject | |
| 3 | Datasets | |
| 4 | Genotypic | |
| 5 | LIMS | |
| 6 | Reporting | |
| 8 | Work Tracking | Work Tracking Module |
| 9 | Admin | |
| 10 | Disease | |

The next function we look at is the “Function” tab. This lists all available functions (pages). Again, we would not want to alter these without first creating the java/database code in order to enable it.



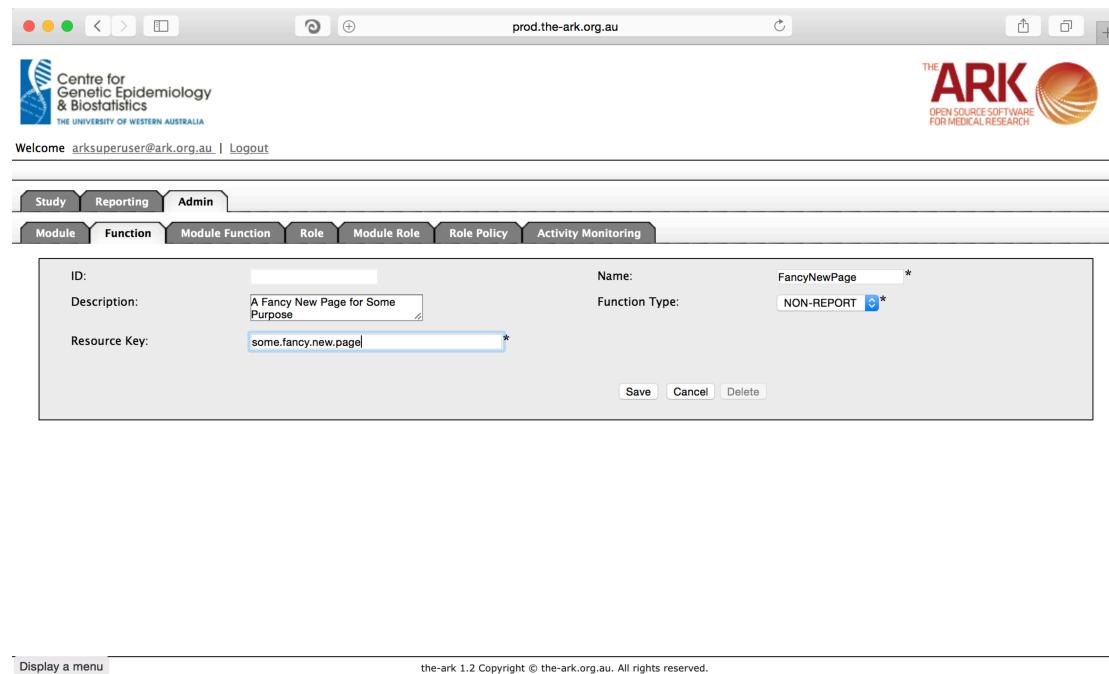
The screenshot shows a web-based application interface for 'THE ARK OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH'. At the top, there are navigation tabs: 'Study' (selected), 'Reporting', 'Admin', 'Module', 'Function' (selected), 'Module Function', 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. Below these tabs is a search bar with fields for 'ID:' and 'Name:', a dropdown menu labeled 'Function Type: Choose One', and buttons for 'Search', 'Reset', and 'New'. The main content area displays a table of functions:

| ID: | Name: | Description: | Function Type: |
|-----|------------------------|---|----------------|
| 1 | STUDY | Study Management usecase. This is represented via the Study Detail Tab under the main Study Tab. | NON-REPORT |
| 2 | STUDY_COMPONENT | Study Component usecase. This is represented via the StudyComponent Tab under the main Study Tab. | NON-REPORT |
| 3 | MY_DETAIL | Edit My details usecase, this is represented via My Detail tab. | NON-REPORT |
| 4 | USER | User management usecase. This is represented via the User Tab under the main Study Tab. | NON-REPORT |
| 5 | SUBJECT | Subject management usecase. This is represented via the Subject Tab under the main Study Tab. | NON-REPORT |
| 6 | PHONE | Manage phone usecase. This is represented via the Phone tab under the main Study Tab. | NON-REPORT |
| 7 | ADDRESS | Manage Address | NON-REPORT |
| 8 | ATTACHMENT | Manage Consent and Component attachments. This is represented via the Attachment tab under Subject Main tab. | NON-REPORT |
| 9 | CONSENT | Manage Subject Consents. This is represented via the Consent tab under the main Study Tab. | NON-REPORT |
| 10 | SUBJECT_UPLOAD | Bulk upload of Subjects | NON-REPORT |
| 11 | SUBJECT_CUSTOM_FIELD | Manage Custom Fields for Subjects. | NON-REPORT |
| 12 | DATA_DICTIONARY | Phenotypic Data Dictionary use case. This is represented by the Data Dictionary tab, under the main Phenotypic Tab. | NON-REPORT |
| 13 | DATA_DICTIONARY_UPLOAD | Phenotypic Data Dictionary Upload use case. This is represented by the Data Dictionary Upload tab, under the main Phenotypic Tab. | NON-REPORT |
| 14 | PHENO_COLLECTION | Phenotypic Collection use case. This is represented by the Collection tab, under the main Phenotypic Tab. | NON-REPORT |
| 15 | FIELD_DATA | Phenotypic Field Data use case. This is represented by the Field Data tab, under the main Phenotypic Tab. | NON-REPORT |
| 16 | FIELD_DATA_UPLOAD | Phenotypic Field Data Upload use case. This is represented by the Data Upload tab, under the main Phenotypic Tab. | NON-REPORT |
| 17 | LIMS SUBJECT | LIMS Subject use case. This is represented by the Subject tab, under the main LIMS Tab. | NON-REPORT |
| 18 | LIMS_COLLECTION | LIMS Collection use case. This is represented by the Collection tab, under the main LIMS Tab. | NON-REPORT |
| 19 | BIOSPECIMEN | LIMS Biospecimen use case. This is represented by the Biospecimen tab, under the main LIMS Tab. | NON-REPORT |
| 20 | INVENTORY | LIMS Inventory use case. This is represented by the Inventory tab, under the main LIMS Tab. | NON-REPORT |

At the bottom left, there is a link to 'Display a menu for "prod.the-ark.org.au/ark/home?1#"' and a copyright notice: 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

Assuming we did all of the necessary java and database changes to facilitate the need for a new function, we can list its availability here and make sure that its reference were clear here.

As with all our modules/functions we have the exact same search/create/update look as always. Click new to create your new module, and then fill out the details similar to below. Please follow standard protocols and capitalisation in the same way you see in this example. That way fellow developers know what to expect when referencing this function (e.g.; in wicket applications). Click save.



The screenshot shows a web browser window with the URL `prod.the-ark.org.au`. The page is titled "Centre for Genetic Epidemiology & Biostatistics THE UNIVERSITY OF WESTERN AUSTRALIA". On the right, there is a logo for "THE ARK OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH". The main content area has a header with tabs: "Study", "Reporting", and "Admin". Under "Admin", there are sub-tabs: "Module", "Function", "Module Function", "Role", "Module Role", "Role Policy", and "Activity Monitoring". The "Function" tab is selected. A form is displayed for creating a new function:

| | | | |
|---------------|-----------------------------------|---|----------------|
| ID: | | Name: | FancyNewPage * |
| Description: | A Fancy New Page for Some Purpose | Function Type: | NON-REPORT * |
| Resource Key: | some.fancy.new.page | <input type="button" value="Save"/> <input type="button" value="Cancel"/> <input type="button" value="Delete"/> | |

At the bottom of the page, there is a link "Display a menu" and a footer note "the-ark 1.2 Copyright © the-ark.org.au. All rights reserved."

Assuming you now have your modules and functions as expected, you can arrange where they are displayed (again, this is likely to have some interaction with java code, so please do not administer this unless you are capable of dealing with any java code which may need altering). This was originally designed to be completely independent, however some more recent development may have involved dependencies between modules/functions. So please step carefully.

The screenshot shows a web browser window for 'prod.the-ark.org.au'. At the top left is the logo for 'Centre for Genetic Epidemiology & Biostatistics' from 'THE UNIVERSITY OF WESTERN AUSTRALIA'. To its right is the 'THE ARK' logo with the tagline 'OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH'. The top navigation bar has tabs for 'Study', 'Reporting', and 'Admin'. Under 'Admin', there are sub-tabs: 'Module', 'Function', 'Module Function' (which is selected), 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. Below the tabs is a search bar with fields for 'Module:' (set to 'Subject'), 'Function:' (set to 'REPORT_STUDYLEVELCONSENT'), and buttons for 'Search', 'Reset', and 'New'. A large table lists module functions with columns for ID, Module, Function, and Sequence. The table contains 13 rows, each corresponding to a different function: REPORT_STUDYLEVELCONSENT (ID 169), REPORT_STUDYCOMPONENT (ID 170), SUBJECT (ID 171), SUBJECT_CUSTOM_DATA (ID 172), PHONE (ID 173), ADDRESS (ID 174), ATTACHMENT (ID 175), CONSENT (ID 176), CORRESPONDENCE (ID 177), FIELD_DATA (ID 178), LIMS SUBJECT (ID 179), BIOSPECIMEN (ID 180), and PEDIGREE (ID 181). The sequence numbers range from 1 to 13. Navigation arrows (<< < > >>) are at the bottom of the table. At the bottom of the page, there is a link 'Display a menu' and a copyright notice: 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

| ID: | Module: | Function: | Sequence: |
|-----|---------|--------------------------|-----------|
| 169 | Subject | REPORT_STUDYLEVELCONSENT | 1 |
| 170 | Subject | REPORT_STUDYCOMPONENT | 2 |
| 171 | Subject | SUBJECT | 3 |
| 172 | Subject | SUBJECT_CUSTOM_DATA | 4 |
| 173 | Subject | PHONE | 5 |
| 174 | Subject | ADDRESS | 6 |
| 175 | Subject | ATTACHMENT | 7 |
| 176 | Subject | CONSENT | 8 |
| 177 | Subject | CORRESPONDENCE | 9 |
| 178 | Subject | FIELD_DATA | 10 |
| 179 | Subject | LIMS SUBJECT | 11 |
| 180 | Subject | BIOSPECIMEN | 12 |
| 181 | Subject | PEDIGREE | 13 |

As you can see, you can filter by module to have a look at what functions are there and their order. If you simply wish to change priorities this should theoretically have no effect. To make changes, simply click on the module wish to alter available functions for. This page will appear;

The screenshot shows a web-based administrative interface for the ARK software. At the top, there are navigation links for 'Study', 'Reporting', and 'Admin'. Under 'Admin', there are tabs for 'Module', 'Function', 'Module Function' (which is selected), 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. On the left, a sidebar titled 'Module:' has a dropdown menu set to 'Subject'. Below it, a section titled 'Module Functions:' shows two lists: 'Available' and 'Selected'. The 'Available' list contains items like 'STUDY', 'STUDY_COMPONENT', 'MY_DETAIL', 'USER', 'SUBJECT_UPLOAD', 'SUBJECT_CUSTOM_FIELD', 'DATA_DICTIONARY', 'DATA_DICTIONARY_UPLOAD', 'PHENO_COLLECTION', and 'FIELD_DATA_UPLOAD'. The 'Selected' list contains items like 'REPORT_STUDYLEVELCONSENT', 'REPORT_STUDYCOMPONENTCONSENT', 'SUBJECT', 'SUBJECT_CUSTOM_DATA', 'PHONE', 'ADDRESS', 'ATTACHMENT', 'CONSENT', 'CORRESPONDENCE', and 'FIELD_DATA'. At the bottom right of the main content area are 'Save', 'Cancel', and 'Delete' buttons. At the very bottom of the page, there is a footer bar with a 'Display a menu' link and the text 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

From here, you can simply add and remove modules or change their order (again: at your own risk, as we cannot guarantee dependency issues in Java code as we have many contributors now). The list of available module-functions is to your left, and the ordered list is to the right. Each module-function can be shifted up or down in precedence/order as well.

The next function we will look at is Roles. So far we have roles designed to give certain capabilities for each module. So far we have read-only (cannot modify in that module but can see everything), Data manager (can modify data but not the study structure and functionality itself) and Administrator (can change anything including the structure and functionality of a module itself) roles.

Again, this is a module, I would not recommend playing with too much without expecting downstream affects.

The screenshot shows a web browser window for 'prod.the-ark.org.au'. At the top, there are navigation icons and the URL. On the left, there's a logo for 'Centre for Genetic Epidemiology & Biostatistics' and 'THE UNIVERSITY OF WESTERN AUSTRALIA'. To the right is the 'THE ARK' logo with the tagline 'OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH'. Below the header, a navigation bar has tabs for 'Study', 'Reporting', 'Admin', 'Module', 'Function', 'Module Function', 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. The 'Role' tab is active. The main content area displays a table of roles:

| ID: | Name: | Description: |
|-----|------------------------------|--------------------------------------|
| 1 | Super Administrator | Highest level user of the ARK system |
| 2 | Study Administrator | |
| 3 | Study Read-Only user | |
| 4 | Subject Administrator | |
| 5 | Subject Data Manager | |
| 6 | Subject Read-Only user | |
| 7 | Pheno Read-Only user | |
| 8 | Pheno Data Manager | |
| 9 | LIMS Read-Only user | |
| 10 | LIMS Data Manager | |
| 11 | Geno Read-Only User | |
| 12 | LIMS Administrator | |
| 13 | Pheno Administrator | |
| 14 | New Role | |
| 15 | Work Tracking Administrator | Work Tracking Administrator |
| 16 | Work Tracking Data Manager | Work Tracking Data Manager |
| 17 | Work Tracking Read-Only User | Work Tracking Read-Only User |
| 18 | Reporting Administrator | Reporting Administrator |
| 19 | Reporting Data Manager | Reporting Data Manager |
| 20 | Reporting Read-Only User | Reporting Read-Only User |

At the bottom of the table, there are navigation links: '<< < > >>'. Below the table, there are links for 'Display a menu' and 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

Module Role is the next function we will look at.

The screenshot shows the ARK software interface. At the top, there is a header with the Centre for Genetic Epidemiology & Biostatistics logo and the THE ARK OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH logo. Below the header, a navigation bar has 'Admin' selected. Under 'Admin', the 'Module Role' tab is selected. A search bar and a 'New' button are visible. The main content area displays a table of module roles:

| ID | Module | Role |
|----|---------------|------------------------------|
| 6 | Datasets | Pheno Read-Only user |
| 7 | Datasets | Pheno Data Manager |
| 12 | Datasets | Pheno Administrator |
| 10 | Genotypic | Geno Read-Only User |
| 8 | LIMS | LIMS Read-Only user |
| 9 | LIMS | LIMS Data Manager |
| 11 | LIMS | LIMS Administrator |
| 26 | Reporting | Reporting Administrator |
| 27 | Reporting | Reporting Data Manager |
| 28 | Reporting | Reporting Read-Only User |
| 35 | Study | Study Administrator |
| 36 | Study | Study Read-Only user |
| 3 | Subject | Subject Administrator |
| 4 | Subject | Subject Data Manager |
| 5 | Subject | Subject Read-Only user |
| 22 | Work Tracking | Study Administrator |
| 23 | Work Tracking | Work Tracking Administrator |
| 24 | Work Tracking | Work Tracking Data Manager |
| 25 | Work Tracking | Work Tracking Read-Only User |

At the bottom left, there are '<< < > >>' navigation buttons. The footer contains a 'Display a menu' link and the text 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

There is not a great deal of need to change this functionality unless creating new roles, in which case this is where you would associate that new role to the module. For example, if we intend to have a new role called "Obfuscated Read Only" where certain field could be hidden from even a low-security-read only person, in which case we simple move the role from "available" to "selected" for the given module. Then click save.

The screenshot shows the ARK software interface. At the top, there is a header with the Centre for Genetic Epidemiology & Biostatistics logo and the THE ARK OPEN SOURCE SOFTWARE FOR MEDICAL RESEARCH logo. Below the header, a navigation bar has 'Admin' selected. Under 'Admin', the 'Module Role' tab is selected. A search bar and a 'Save' button are visible. The main content area displays a dialog for selecting module roles:

Module: Datasets *

Module Roles:

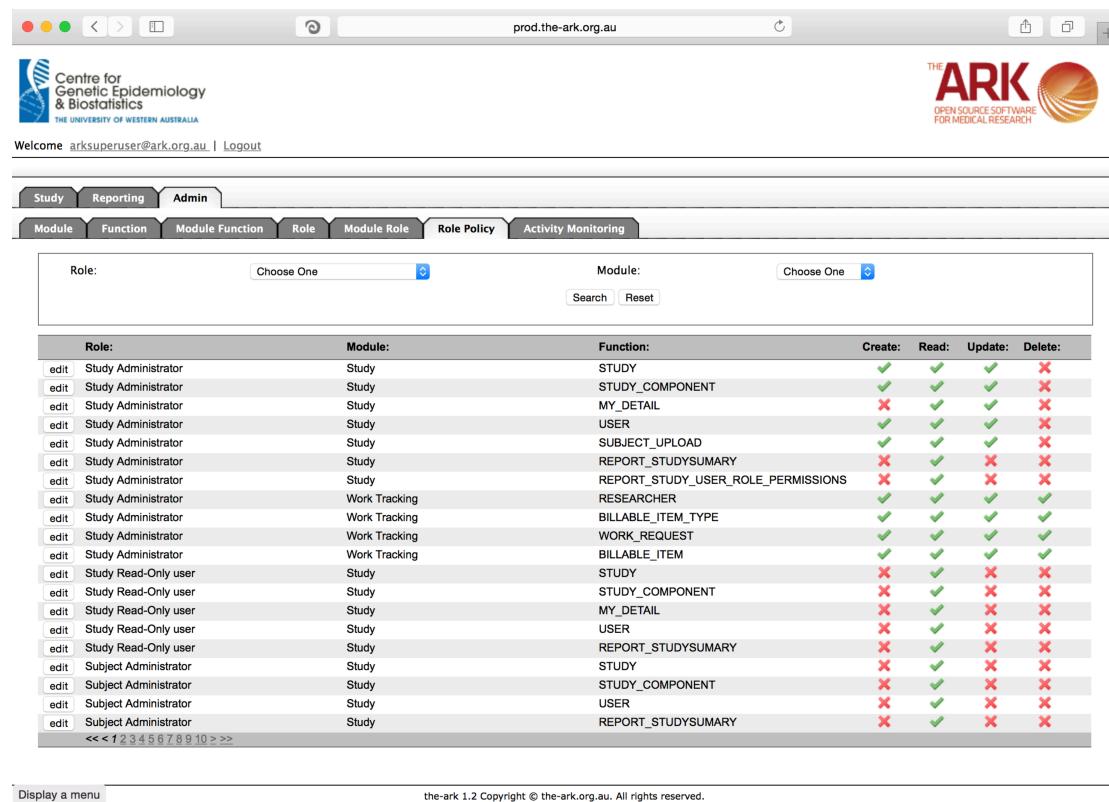
| Available | Selected |
|--|---|
| Super Administrator Study Administrator Study Read-Only user Subject Administrator Subject Data Manager Subject Read-Only user LIMS Read-Only user LIMS Data Manager Geno Read-Only User LIMS Administrator | Pheno Administrator Pheno Data Manager Pheno Read-Only user |

Note: Any newly created module/roles will have a default Read permission added into the Role Policy

Save Cancel Delete

At the bottom left, there is a 'Display a menu' link. The footer contains the text 'the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.'

The next function is where we really start to coordinate all of these roles and the capabilities they will have within the application. Again, we try to have this inherently set up in our base scripts when you install The Ark. But if you wish to alter the set up, this is where you can. You can basically see for each role, module, function combination, you have the ability to allow create, read, update and delete functionality.



The screenshot shows a web-based administrative interface for The Ark system. At the top, there are navigation links for 'Study', 'Reporting', and 'Admin'. Under 'Admin', there are tabs for 'Module', 'Function', 'Module Function', 'Role', 'Module Role', 'Role Policy' (which is currently selected), and 'Activity Monitoring'. The main content area is titled 'Role Policy' and displays a grid of roles, modules, and functions, each with checkboxes for 'Create', 'Read', 'Update', and 'Delete' permissions. A search bar and a 'Reset' button are located at the top of the grid. The bottom of the grid shows navigation links for page numbers (1-10) and '<< < > >>'.

| Role: | Module: | Function: | Create: | Read: | Update: | Delete: |
|----------------------------|---------------|------------------------------------|---------|-------|---------|---------|
| edit Study Administrator | Study | STUDY | ✓ | ✓ | ✓ | ✗ |
| edit Study Administrator | Study | STUDY_COMPONENT | ✓ | ✓ | ✓ | ✗ |
| edit Study Administrator | Study | MY_DETAIL | ✗ | ✓ | ✓ | ✗ |
| edit Study Administrator | Study | USER | ✓ | ✓ | ✓ | ✗ |
| edit Study Administrator | Study | SUBJECT_UPLOAD | ✓ | ✓ | ✓ | ✗ |
| edit Study Administrator | Study | REPORT_STUDYSUMMARY | ✗ | ✓ | ✗ | ✗ |
| edit Study Administrator | Study | REPORT_STUDY_USER_ROLE_PERMISSIONS | ✗ | ✓ | ✗ | ✗ |
| edit Study Administrator | Work Tracking | RESEARCHER | ✓ | ✓ | ✓ | ✓ |
| edit Study Administrator | Work Tracking | BILLABLE_ITEM_TYPE | ✓ | ✓ | ✓ | ✓ |
| edit Study Administrator | Work Tracking | WORK_REQUEST | ✓ | ✓ | ✓ | ✓ |
| edit Study Administrator | Work Tracking | BILLABLE_ITEM | ✓ | ✓ | ✓ | ✓ |
| edit Study Read-Only user | Study | STUDY | ✗ | ✓ | ✗ | ✗ |
| edit Study Read-Only user | Study | STUDY_COMPONENT | ✗ | ✓ | ✗ | ✗ |
| edit Study Read-Only user | Study | MY_DETAIL | ✗ | ✓ | ✗ | ✗ |
| edit Study Read-Only user | Study | USER | ✗ | ✓ | ✗ | ✗ |
| edit Study Read-Only user | Study | REPORT_STUDYSUMMARY | ✗ | ✓ | ✗ | ✗ |
| edit Subject Administrator | Study | STUDY | ✗ | ✓ | ✗ | ✗ |
| edit Subject Administrator | Study | STUDY_COMPONENT | ✗ | ✓ | ✗ | ✗ |
| edit Subject Administrator | Study | USER | ✗ | ✓ | ✗ | ✗ |
| edit Subject Administrator | Study | REPORT_STUDYSUMMARY | ✗ | ✓ | ✗ | ✗ |

To alter any of these module-role-permission combinations, simply click the edit button.

The screenshot shows a web-based application interface for managing roles and permissions. At the top, there are navigation links for 'Study', 'Reporting', and 'Admin'. Under 'Admin', there are tabs for 'Module', 'Function', 'Module Function', 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. The 'Role' tab is selected. Below the tabs, there are search and filter fields for 'Role:' and 'Module:', both with dropdown menus labeled 'Choose One'. There is also a 'Search' button and a 'Reset' button. The main content area is a table titled 'Role:'. The table has columns for 'Role', 'Module', 'Function', and four permission levels: 'Create', 'Read', 'Update', and 'Delete'. Each row represents a specific role-module-function combination. The 'Create' column contains radio buttons for selecting permissions. The 'Delete' column contains a 'save' button. The table is scrollable, indicated by a bottom navigation bar with page numbers from << 1 2 3 4 5 6 7 8 9 10 >>.

| Role: | Module: | Function: | Create: | Read: | Update: | Delete: |
|----------------------------|---------------|------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| edit Study Administrator | Study | STUDY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input type="checkbox"/> save |
| edit Study Administrator | Study | STUDY_COMPONENT | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Study | MY_DETAIL | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Study | USER | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Study | SUBJECT_UPLOAD | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Study | REPORT_STUDYSUMMARY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Study | REPORT_STUDY_USER_ROLE_PERMISSIONS | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Work Tracking | RESEARCHER | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Work Tracking | BILLABLE_ITEM_TYPE | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Work Tracking | WORK_REQUEST | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Administrator | Work Tracking | BILLABLE_ITEM | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Read-Only user | Study | STUDY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Read-Only user | Study | STUDY_COMPONENT | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Read-Only user | Study | MY_DETAIL | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Read-Only user | Study | USER | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Study Read-Only user | Study | REPORT_STUDYSUMMARY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Subject Administrator | Study | STUDY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Subject Administrator | Study | STUDY_COMPONENT | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Subject Administrator | Study | USER | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| edit Subject Administrator | Study | REPORT_STUDYSUMMARY | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |

Display a menu the-ark 1.2 Copyright © the-ark.org.au. All rights reserved.

You will notice the ticks and crosses are now gone and you can select the radio boxes you wish to permit (select) or not permit (de-selected). Then simply click the save button.

The final functionality available in the Admin module is “Activity monitoring”. This function allows us to see who is logging into the system, from what IP address and when.

This can be useful in debugging who has been in the system and might have changed data in instances of confusion from users. It also may be useful to see if certain studies are being able to adequately use the functionality of The Ark. If resources are being heavily drained, it may be a useful debugging tool to see why. Please note though, that only the sessions since the app server’s last restart are available (eg; our app server has been up since 2014, oldest logins first, go to the end to see the latest logins).

The screenshot shows a web browser window for 'prod.the-ark.org.au'. At the top, there's a navigation bar with tabs for 'Study', 'Reporting', and 'Admin'. Under 'Admin', there are sub-tabs: 'Module', 'Function', 'Module Function', 'Role', 'Module Role', 'Role Policy', and 'Activity Monitoring'. The 'Activity Monitoring' tab is currently selected. Below the tabs is a table with the following columns: 'Session ID', 'User ID', 'Host', 'Started (logged in)', and 'Last Accessed'. The table contains several rows of session data, with the last row being the most recent.

| Session ID: | User ID: | Host: | Started (logged in): | Last Accessed: |
|-----------------------------------|-------------------------|--------------|----------------------|---------------------|
| 0047B8223071309419A942348FB2305A | arksuperuser@ark.org.au | 130.95.5.175 | 17/12/2014 12:30:15 | 17/12/2014 12:30:41 |
| 4DAD7774AB0AE1012245192771762764 | tegan.mcnab@uwa.edu.au | 130.95.5.136 | 17/12/2014 12:32:17 | 17/12/2014 12:32:24 |
| 716B1812B1A99CC9582A80FAE4C079B | rachel.jones@uwa.edu.au | 130.95.5.137 | 17/12/2014 12:44:48 | 17/12/2014 01:02:11 |
| DB8009595C28953F43652EEA889CF99FC | arksuperuser@ark.org.au | 130.95.5.163 | 17/12/2014 12:46:03 | 17/12/2014 02:30:41 |
| AAADF9282CF4C292A10D620B0040ADBE6 | arksuperuser@ark.org.au | 130.95.5.163 | 17/12/2014 03:02:22 | 17/12/2014 06:28:58 |
| 85AEF50DBDE66BD8A800C95628319A92F | arksuperuser@ark.org.au | 130.95.5.163 | 17/12/2014 07:59:23 | 17/12/2014 07:59:49 |
| 591C1BFBCB0B159D0B9ECC240ED53AA | tegan.mcnab@uwa.edu.au | 130.95.5.136 | 18/12/2014 10:21:48 | 18/12/2014 10:58:15 |

This module was particularly difficult to document without a great depth of programming knowledge. If you require any further guidance please feel free to ask our ark-informatics git hub group.

<https://github.com/The-Ark-Informatics/ark>