

NECS 4.0 User Account Management



NECS 4.0 user management is based on roles to account mapping for authenticated users. User Authentication is always achieved through Multi-Factor-Authentication (MFA).

NECS 4.0 Role to Account Type Mapping		
Role	Account/Role Description	Created by:
Initial Owner	Created per tenant	NRB
Manager(s)	This is an admin level role, and hence an admin level user (at the tenant level) that can create new users, or delete users.	Initial Owner Account
Approvers	An approval role can approve any request from a user requiring authorisation to purchase any new service or purchase an upgrade to an existing service.	Managers
Standard User	A Standard user Account is capable of doing standard tasks such as creating a VM, managing VMs etc – and their actions can be approved by an Approver Role.	Initial Owner/ Managers
Limited Access User	A view only account that cannot create, or delete any resources, but can only view resources available.	Managers

Multi-Factor Authentication (MFA)

Current MFA method is through SMS where a user will receive a PIN code, via text message, in which they have a timedelay to enter this code within the portal in order to be authenticated.

Role Management

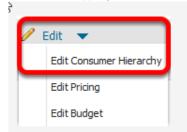
Within the context of NECS 4, the definition of roles and groups are as follows:

A role is a group. It is defined as members having the same role within a Tenant's CMP domain. A policy is considered a mechanism to approve a request.

We have but one notion of user, groups, and policies.

The changes to roles occurs through the admin menu:

User Role Mappings



This section then leads to the following the screen allowing the administrator to change the role for a given user:

NRB Enterprise Cloud Services		
Catalog Deployments Inbox		
Modify - P61387		
Modify the user's attributes		
WARNING:	You are not entitled to modify all this User's Attributes. The affected attributes will be read-only.	
First Name:	Ehab (externe)	
● Last Name:	KIRELLOUS	
E-mail Address:	Ehab.KIRELLOUS@nrb.be	
Mobile phone:	+32475753533	
* Roles:	Managers Approvers Restricted Users	

A screenshot of their application can be seen in the image below:

Workflow Management

Concerning workflow approval-process - our ITSM tool allows for the creation of pre-defined workflows where tasks are signed off between several approval-authorities who ensure that validation occurs before the next sub-task is started. The workflow process that is integral with our HPSM tool, and has an interface in our CMP, is essential for how our CAB and ECAB meetings work.

For all Standard Change requests, workflow processes are normal and their implementation for specific client Service requests (SRQs) are an integral part of how NRB's Change Management Process operates.

Silo Application Management

For scenarios where the client has a need to have application partners manage an application on their behalf, NRB's NECS 4.0 Management platform offers a Silo Management capability allowing for each application partner to manage the Virtual Machine Environment under their remit independently from other partners. Any changes, modifications, purchases, or deletions for the VM's under their remit is sent to the Global User Account (The Client) for approval.

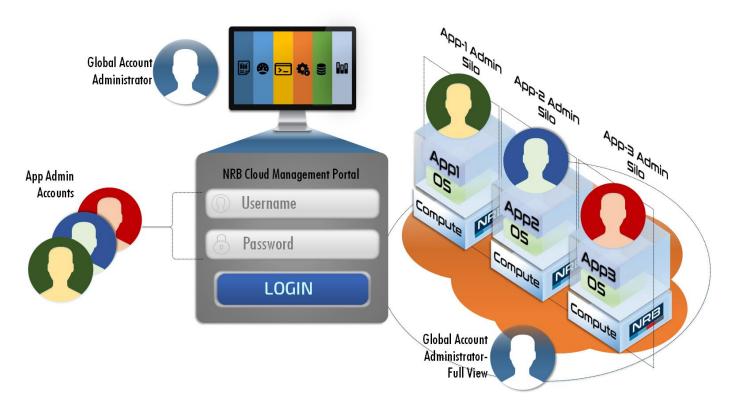
Therefore, a client can have a number of application partners - working independently, and within a secure environment, without any contact with other partners, all under the supervision of the main user.



This ability of managing applications in "silo" mode is made possible through our **NECS 4.0 Cloud Management Portal**. Given that there are different applications partners who will manage different applications, NRB's unique Cloud Management Portal will allow each application partner the ability to access the VM's for their applications without any contact, or mixing with the VM's of other applications that are outside their remit.

NRB hence will provide a common infrastructure platform from which all Application providers can work normally to manage, monitor, and provision the nodes responsible for their respective applications under our common Framework: NECS 4.0 (or NRB Enterprise Cloud Solution Portal, v.4.0).

The schema below shows exactly how this can work:



Each application partner (Red/Blue/Green) will have a login/user unique for them and will enable them to manage their nodes as they wish; again, with a workflow approval to the "Global Account Administrator".









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