

CE ROC Framework for Resource Allocation

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- **Roles**

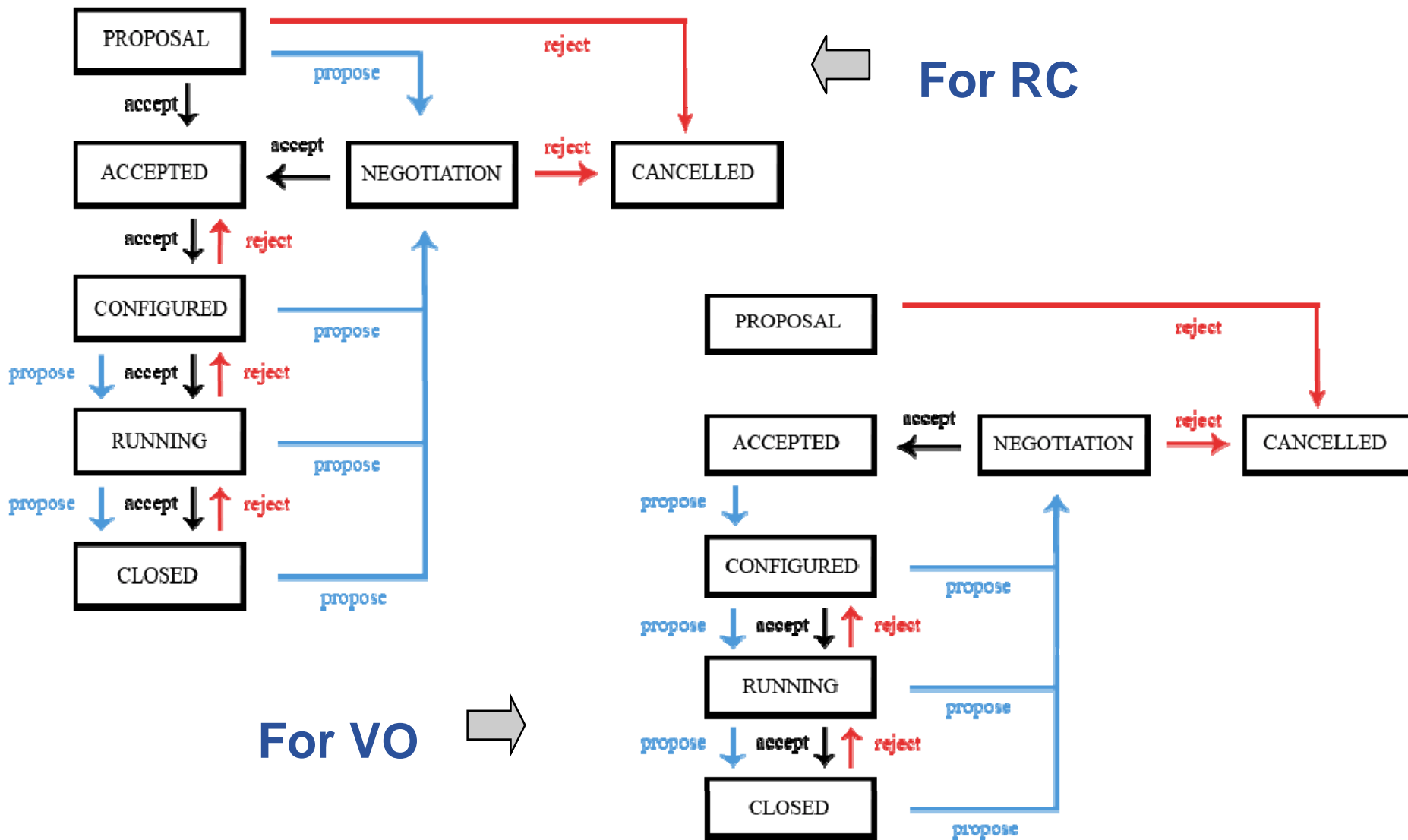
- Participate in communication/negotiation about VO requests for resources
- Ensure that resource are allocated to VOs according to policies, declaration, etc.

- **Means**

- E-mail forwarding (usualy without response)

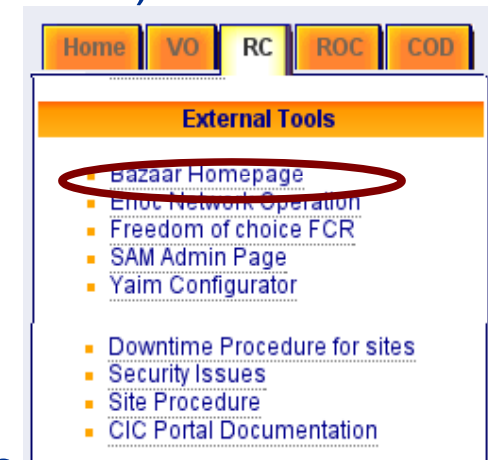
- **Clear view on VO demands for resources**
- **Well defined procedures for negotiations, agreement, re-configuration and approval**
- **Communication patterns**
- **Possibility of tracking demands/policy changes**
- **Easy way to negotiate agreement conditions**
- **Feedback**

The solution is to define process and build collaboration tool. We call the project “Bazaar”



- **Bazaar – a tool supporting resource management**
 - Integrated with CIC-Portal (external tool in RC section)
 - No cost of entry – data obtained from GOCDDB and CIC-Portal VO-cards
 - Easy in use

- **The most important features of Bazaar v1.0:**
 - Call and contract between VOs and RCs management
 - Clear view on VOs demands for resources
 - Support for the process of resource negotiation
 - E-mail notifications for VO and RC Managers
 - Tracking of contract changes



Call = request for resources.
It can be created by VO Managers
or by ROC



VO Managers or ROC can:

- Create and edit their calls
 - Specify needed resources and services
 - Specify when call starts, ends and is open for offers
- Send notification to selected group of site managers about a call
- Browse contracts related with their calls and negotiate them

Contract proposal = way of offering resources by site for a specified call.

It can be (re)negotiated by both VO and RC.

RC Managers can:

- **Create contracts in respond to VO demand**
 - Specify offered resources, services and time boundaries
- **Browse contracts created by them and renegotiate**
- **Browse calls in which their participate**

- **Bazaar is ready to use**
- **CE sites are in progress to define the current resource policy in this framework**
- **Main idea is to make Bazaar the collaboration tool for resource allocation in CE**
 - notifications about new VOs or new requests for resources are sent to site admins using this tool
 - contracts of each site should be defined in Bazaar by site's admin, as ROCs are obliged to provide information about execution of policies profile
 - External VO roles are partially performed by ROC, but regional VOs managers are especially welcomed to use it directly

- Bazar v1.1 is currently in preparation (in development instance of CIC-Portal)
 - Resources usage reports and diagrams
 - Better call and contract description (step towards SLA/SLD)
 - Better message management
 - Possibility to provide feedback about sites and VO
- **Release is planned for January 2009**

Enabling **Metrics to define SLA between site and VO**

1	The site must be an EGEE production site, keeping the following SLA/SLD metrics:	
	1.1 Minimum site availability (optional)	%
	1.2 Minimum site reliability (optional)	%
	1.3 Maximum time to acknowledge GGUS tickets (optional)	days
	1.4 Maximum time to resolve GGUS incidents (optional)	days
2	Specification of computational services (can be more than one such class)	
	2.1 Guaranteed number of slots in LRMS (CPUs or cores)	-
	2.2 Maximum wall-clock-time n specified time period (weekly/monthly) (optional)	hours
	2.3 Maximum queing time within guaranteed pool (optional)	min
	2.4 Average power of a single slot	kSpecInt
	2.5 Access period	dates from-to
	2.6 Advance configuration (optional)	hours
	2.7 Available capacity in "Shared Workspace" (optional)	GB
	2.8 Available capacity of file system on a worker node (optional)	GB
	2.9 Additional requirements (optional)	-
3	Specification of grid storage services	
	SLA can define several classes containing following metrics:	
	3.1 Storage quota guratanteed	GB
	3.2 Maximum latency in accesing files (optional)	ms
	3.3 Minimum bandwidth in accesing files (optional)	Gb/s
	3.4 Storage quota for temporal use (optional)	GB
	3.5 Time limit for temporal use of storage (optional)	hours
	3.6 Period of using storage	dates from-to
	3.7 Advance configuration (optional)	hours
4	Specification of networking services (optional)	
	4.1 Up-link bandwidth	Gb/s
	4.2 Access period	dates from-to
5	Specification of services	
	5.1 Site can provide for VO some of the following services (more than one instance might be possible in some cases): - Top Level BDII, UI, WMS, LFC, FTS, VOMS, MyProxy, AMGA, Hydra - Other specified by VO (optional)	- -
	5.2 Advance configuration	hours

- We deployed Bazaar tool, that has potential to improve resources allocation
- Development works towards RC-VO SLA/SLD
- It is open for other regions and VOs to try (directly in CIC Portal)
- Any feedback is appreciated

