

Category	Sub-Category	Sub-Category Priority	Project Description	Notes
Application: Access Provisioning			Build an application to program users and strong passwords who can use the network - ex. Hotel guests who are provided access for the duration of the stay	
Application: Device healthcheck			Build a program to provide a BYOD device a temp IP address, run diags and virus scanner checks and on success based on login, send him to employee or guest network. Otherwise send it to quarantine network	
Application: Dynamic Access Provisioning			Build an application to allow access to users based upon time of day (use case - Schools where access & access rights might vary based upon how a room or area of the School is intended to be used); Parental Control	
Application: Dynamic Firewall			Build a dynamic firewall application that takes feeds from opensource ones Spamhause and Phishtank; Must contain whitelist and blacklist domains; Use case: school deployment, a firewall for network that gets lots of BYOD devices	
Application: Faucet	Feature Update	1	Add header to mirrored packets giving original mirrored port (Eg when packet is mirrored, push additional VLAN tag N where N was the port it was mirrored from)	
Application: Faucet	Feature Update	1	Add support for BroNetcontrol framework	https://github.com/bro/bro-netcontrol
Application: Flow Manager		1	A UI program to get real-time info on flows installed on the switches managed by a controller - interrogate controller database	
Application: Hadoop Yarn2			Integration with Yarn2 for programming network nodes for Hadoop traffic	
Application: Tapestry			Tapestry application	https://github.com/FlowForwarding/loom/tree/master/tapestry/docs
Application: Usage Billing			Build an application to get usage data per port with start and end times - used in Hotel Internet service billing	
Core Infrastructure	Feature Update	1	Upgrade to python3	
Core Infrastructure	Feature Update	1	Separate IPv4 and IPv6 FIB entries to dedicated FIB tables (better scaling)	
Core Infrastructure	Feature Update	1	Reduce pylint errors to 0	
Deployment: Hadoop Network			Use of Faucet on a Hadoop network	https://github.com/FlowForwarding/incubation/blob/master/papers_presos/HadoopOF_NDM.pdf & https://github.com/FlowForwarding/incubation/blob/master/papers_presos/Infoblox_Hadoop_OF_NDM_1106.pdf
Deployment: Enterprise Network			Document deployment of Faucet on a switch for enterprise network (ACLs, VLANs integration with other services)	
Core Infrastructure	Feature Update		simplest possible STP (spanning tree)/loop detection	
Core Infrastructure	Feature Update		broadcast helper (allow Ethernet broadcasts to be redirected to a configured port rather than broadcasted)	
Core Infrastructure	Feature Update		BGP (integrate ryu's BGP support with FAUCET's static routing)	
			NFV containerization of DNS and DHCP (standard containers to offload DNS and DHCP from FAUCET to containers)	
Core Infrastructure	Feature Update		Add meters to OF channel channel (cap maximum packet in rate using OF meters)	
Core Infrastructure	Feature Update		Add support for multiple datapaths without requiring multiple instances of Facuet to be running.	Look at how Valve handles this, ideally have one config file with an entry for each datapath.