

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Web site (5%)	Document goals, benefits desired outcome			Improve documentation on setting up sites																				Prepare and make presentations on experiences and
Monitoring sites (20%)	Install IEPM-BW at CERN	Train CERN person and help set up tier 1 & 2 remote sites						Select next IEPM-BW monitoring site (see below)	Contact next site and establish POC	Install IEPM-BW at next site	Train next site person and help set up tier 1 & 2 remote sites								Select next IEPM-BW monitoring site (see below)	Contact next site and establish POC, install swr	Train next site person and help set up tier 1 & 2 remote sites			
			Contact BNL and establish POC	Set up ssh account	Install IEPM-BW at BNL	Train BNL person and help set up tier 1 & 2 remote sites							Select next IEPM-BW monitoring site (see below)	Contact next site and establish POC, install swr	Train next site person and help set up tier 1 & 2 remote sites									
IEPM-toolkit (20%)	Enhance code to enable less network traffic			Enhance code to enable reduced security requirements			Integrate new features and make code distributable			Distribute new version of IEPM														Distribute new version of I
Analysis (student & 10% SLAC FTE, partially unfunded by DoE, also using funding from US Dept of State for NIIT Pakistan students)	Develop tool for traceroute analysis and visualization			Document traceroute analysis with a Program Logic Manual, and integrate into IEPM-BW			Develop prototype tools to automate the detection of anomalous changes in bandwidth			Compare tools, choose most appropriate, understand behavior with the parameters, and for functions the tool applies			Add visualization of the changes			Document with a Program Logic Manual, write publication			Integrate anomaly detection and traceroutes into IEPM-BW			Add web services access to IEPM-BW bandwidth measurements and traceroutes		
Add required improvements (20%)	Add database to aid in data selection		Improve ability to select which groups of sites to display					Provide information on current status and plans for IEPM-BW. Solicit input for improvements to IEPM-BW			Understand and analyze the requests, decide on most cost-effective to add		Define required changes. Allocate resources to develop improvements. Set up a CVS repository to enable distributed development			Develop chosen requested improvements			Integrate improvements into main distribution					
Data access (10%)																				Add web services access to IEPM-BW bandwidth measurements and traceroutes			Document how to access IEPM-BW data interactively and via web services API	
Ongoing (5%)	Provide consulting to users of IEPM-BW, keep web site up to date, organize and lead occasional phone meetings of participants																							
Unfunded by the present proposal				Use traceroute tools with NLANR AMP data			Investigate integration of traceroute tools with AMP							Understand I2 OWAMP data and experiment with anomalous event detection			Add OWAMP to IEPM-BW			Investigate using event detection with OWAMP data			Modify e accept I2	
Site selection	interest not mentioned above include Umich, Caltech, SDSC, ESnet, IN2P3, DESY, RAL, StarLight, ORNL N.b. SLAC is already a monitoring site with about 40 remote sites and as part of our preliminary preparation we have already set up FNAL as a monitoring site, to prove feasibility, and understand requirements etc. We have also contacted CERN and DESY and have agreements to set them up as IEPM-BW monitoring sites.																							
Travel	Travel to publicize project to network & Grid community, to assist new sites. Two US trips per year, 1 International per year																							

Month	25	26	27	28	29	30	31	32	33	34	35	36
Web site (5%)	status	Write & submit publication on experience & results										
Monitoring sites (20%)							Select next IEPM-BW monitoring site (see below)	Contact next site and establish POC, install swr	Train next site person and help set up tier 1 & 2 remote sites			
	Select next IEPM-BW monitoring site (see below)	Contact next site and establish POC, install swr	Train next site person and help set up tier 1 & 2 remote sites									
IEPM-toolkit (20%)	EPM											
Analysis (student & 10% SLAC FTE, partially unfunded by DoE, also using funding from US Dept of State for NIIT Pakistan students)	Design and develop an event filtering and warning system				Design architecture for on demand info gathering following an anomalous event		Develop package to use existing tools to gather information		Make code distributable			
Add required improvements (20%)	Evaluate need for scheduling and possible solutions			Evaluate need for central access to IEPM_BW data, e.g. a central archive, improved tools for gathering data from multiple sites etc.			Provide scheduling solution		Make code distributable			
Data access (10%)												
Ongoing (5%)												
Unfunded by the present proposal	Event detection to OWAMP data		Integrate event detection into I2 PIPES									
Site selection												
Travel												