Measurements WG
(GT-Mediciones)

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CLARATEC – Lima - Perú
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A project implemented by CLARA

Measurements WG Goals

- Build upon the work started in the previous period (03/2009 – 03/2011) by the Measurements WG.

- Deployment of a monitoring infrastructure based on perfSONAR

Long Term Vision

- Deployment of monitoring nodes in RedCLARA's backbone
- Deployment of at least two monitoring nodes in each NREN connected to RedCLARA
- Deployment of monitoring infrastructures in interested NRENs
- Instalation of monitoring nodes in end user institutions

Proposed MPs in the Future Backbone

Tasks

- Task 01: Deployment and tests with perfSONAR MDM
- Task 02: Deployment and tests with the most recent version of the perfSONAR Performance Toolkit (pS-PT)
- Task 03: Test the tools with IPv6
- Task 04: Interoperability tests between pS-PT and perfSONAR MDM
- Task 05: Recommendations on the software to be deployed for RedCLARA's backbone monitoring infrastructure
- Task 06: Elaboration of the maintenance procedures for RedCLARA's backbone monitoring infrastructure
- Task 07: Dissemination and Training in perfSONAR usage

Reviewed Schedule

	2011					2012												2013						
	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07
1 – Pruebas con MDM			#		#																			
2 – Pruebas con pSPT							#		#															
3 – Pruebas con IPv6											#		#											
4 – Pruebas de Interoperabilidad															#	#								
5 – Recomendación para la troncal de CLARA																		#	#					
6 – Procedimientos de Manutención																					#			#
7 – Difusión y Capacitación													#					#						#
Reuniones	o	o	o	o	o	ox	o		o	o	o	o	o	ox	o	o	o	ox	o		o	o	o	o

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Task 01: Deployment and tests with perfSONAR MDM

- Deployment and tests with perfSONAR MDM (developed by Géant)
- Recommendation for the best solution to be deployed in RedCLARA's backbone

- Collaboration with Géant's team for the installation and test troubleshooting among our sites and with MPs in Europe

perfSONAR MDM Deployments

perfSONAR MDM
PART OF THE GÉANT SERVICES PORTFOLIO

- DANTE is finalizing its implementation across the GÉANT backbone with 35 MPs in the PoPs across the network
- 7 NRENs are road-testing the service

perfSONAR-MDM Status

- Version 3.3 is the latest stable release
- New Version:
  - Includes a new HADES MP and MA.
    - RPM Distribution ready
    - Debian Distribution in preparation
  - Currently the HADES MP in Madrid already supports OWAMP (answers to on-demand tests)
  - They are working on an OWAMP MP which should be available soon

perfSONAR MDM Independent Deployment in RedCLARA

- Suggested set of services:
  - HADES MP (90 packets every minute)
  - BWCTL MP (tests every 6 hours)
  - SQL MA (data stored for 12 months)
  - These services could be configured in a static fashion without the need for a LS
  - It would be nicer if the services would be visible from other parties via a LS

Next Steps (perfSONAR MDM)

- Confirmation of sites and machine configurations for the experimental deployment
  - VC 23/05/12: CEDIA, RAAP, RAU, RNP e RedCLARA (others are welcomed to join)
- Decide where the SQL MA and possibly LS will be deployed – Pending
- Webconf with Géant team for instructions on how to deploy and configure the services:
  - Held on 05/06/12
- Deployment, configuration and tests (IPv4 and IPv6)
  - Currently in Progress (BWCTL-MP) @ CEDIA, RAU, REUNA y RNP
- Report elaboration

Available Machines

NREN	Contact	CPU	RAM	NIC	HD	Availability
CEDIA	Ximena Robles	Dual Core	2 GB	1 Gbps (on board)	500 GB	1st Semester 2012
INNOVA-RED	Carlos Salazar	AMD athlon X3 435	4 GB	1 Gbps	320 GB	Yes
RAAP (INICTEL)	Andrés Leiva Cochachin	XEON 2.4 GHz	2 GB	1 Gbps	200 GB	Dec. 2011
RAU	Luis Silva	Dell PowerEdge 2950 - Procesador 2 x Intel(R) Xeon(R) CPU 3.00GHz	3 GB	100 Mbps	300 GB	Yes
REUNA	Albert Astudillo	i5	8 GB	1 Gbps	500 GB	April/May 2012
RNP	Wagner Pereira	dual-core 3 GHz	2 GB		160 GB	Yes

http://comunidades.redclara.net/wiki/gtmediciones/index.php/Available_Machine_Configuration_for_Experimental_Deployment

Available Machines in RedCLARA's backbone

- Gustavo Garcia (RedCLARA) pointed out the existence of machines in RedCLARA's backbone that are supposed to be used for deploying perfSONAR.
  - Albert (REUNA) had reported problems with the flavor of the OS installed in the machines which supposedely would prevent the deployment of the MDM package (rpm version).

MDM Deployment Strategy

- Szymon presented two options for deployment:
  - single BWCTL MP:
    - Appropriate for the international connection: results for regular tests would be stored at Géant's Measurement Archive service (SQL MA).
  - multiple BWCTL MPs + one SQL MA:
    - Should be our case with the services being deployed
    - Still pending the selection of a machine to install the SQL MA (suggestions/availability are welcome)

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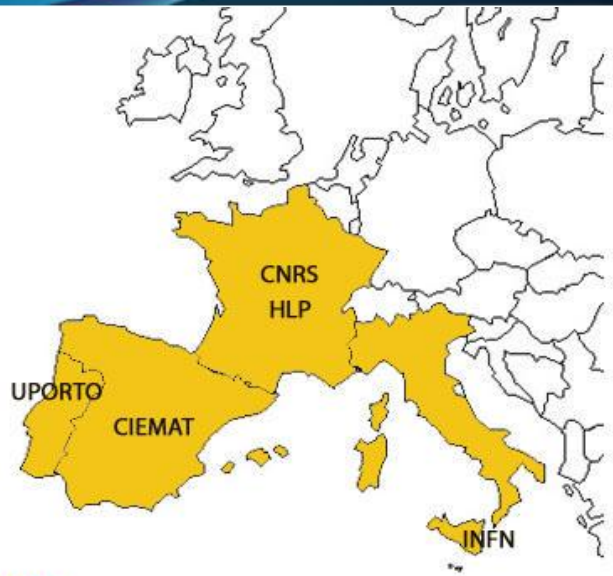
Synergy with GISELA

- Grid Initiatives for e-Science virtual communities in Europe and Latin America
- www.gisela-grid.eu
- Objective:
  - To guarantee the long-term sustainability of the European – Latin American e-Infrastructure and thus ensure the continuity and enhancement of the Virtual Research Communities (VRC) using it.

GISELA Sites



Europe

Italy	INFN – Catania
France	CNRS, HLP
Portugal	U.PORTO
Spain	CIEMAT (Coord. Institution)

Latin America and the Caribbean

Argentina	INNOVA-T
Brazil	UFRJ, UFCG
Chile	REUNA
Colombia	UNIANDES
Cuba	CUBAENERGIA
Ecuador	CEDIA
International	CLARA
Mexico	CUDI, UNAM
Panama	CIDETYS
Peru	RAAP
Uruguay	UdelaR
Venezuela	ULA

MonGISELA

- MonGISELA site: http://mongisela.cecalc.ula.ve/
  - One-way delay tests using pS-Performance Toolkit v.3.2.1.1
- Measurement Points:
  - Brasil: UFRJ
  - Colombia: UIS
  - Ecuador: CEDIA
  - Panamá: UTP
  - Venezuela: ULA

Mongisela.cecalc.ula.ve

mongisela.cecalc.ula.ve

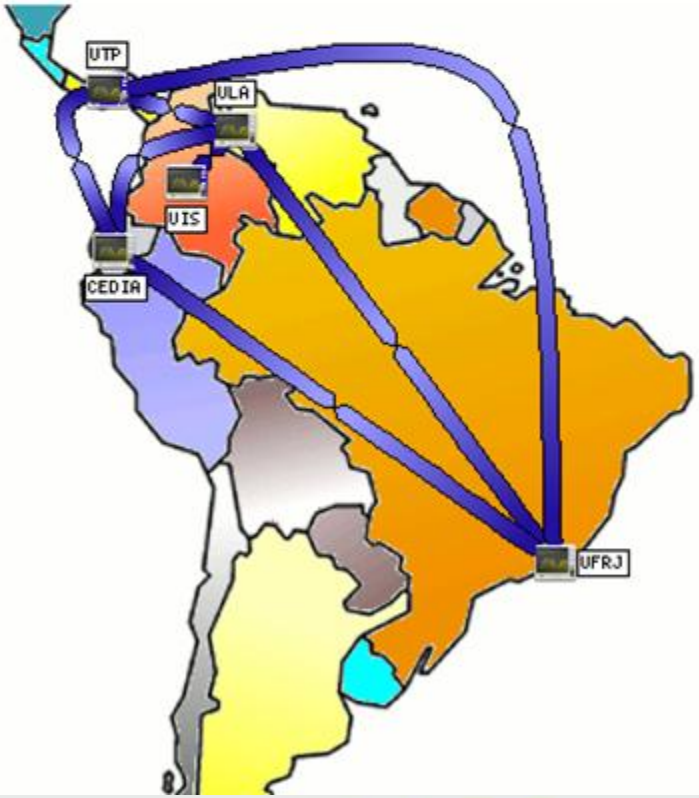
mongisela.cecalc.ula.ve

MonGISELA

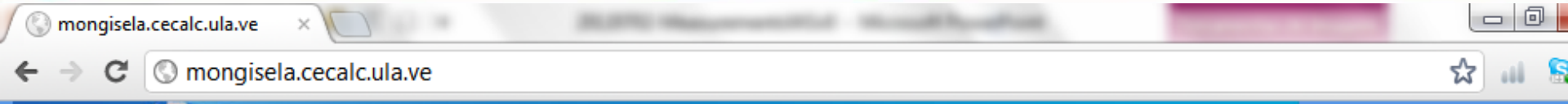
Grid Initiatives for e-Science virtual communities in Europe and Latin America

- Main Map
- Measurement Points
- Documentation
- Contacts
- About MonGISELA

Click on any link of the map to show the network delay between two GISELA Resource Centres



MonGISELA Measurement Points



MonGISELA

Grid Initiatives for e-Science virtual communities in Europe and Latin America

- Main Map
- Measurement Points
- Documentation
- Contacts
- About MonGISELA

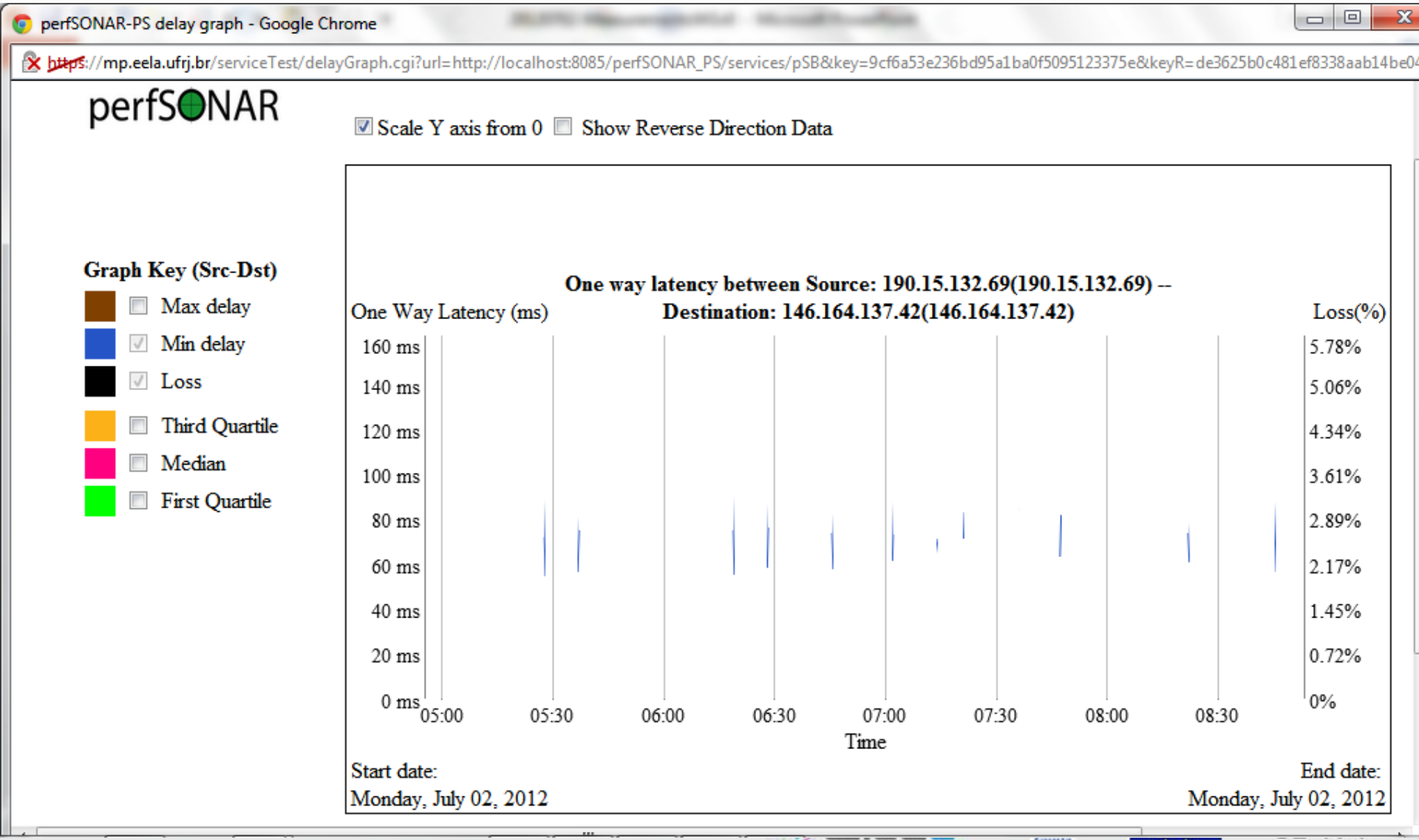
This table shows the list of the Measurement Points (MP) installed around the GISELA Grid infrastructure

Coutry	Institution	FQDN	IP Address
Brasil	Universidade Federal de Rio de Janeiro (UFRJ)	mp.eela.ufrj.br	146.164.137.42
Colombia	Universidad Industrial de Santander (UIS)	servIGALC.uis.edu.co	200.16.117.47
Ecuador	Consorcio Ecuatoriano para el Desarrollo de Internet Avanzado (CEDIA)	-	190.15.132.69
Panamá	Universidad Tecnológica de Panamá (UTP)	mp.utp.ac.pa	168.77.8.44
Venezuela	Universidad de Los Andes (ULA)	mp.cecalc.ula.ve	190.168.16.11

alice2 CLARA

MonGISELA: ULA-VE MP

Some Results (CEDIA → UFRJ)



MonGISELA

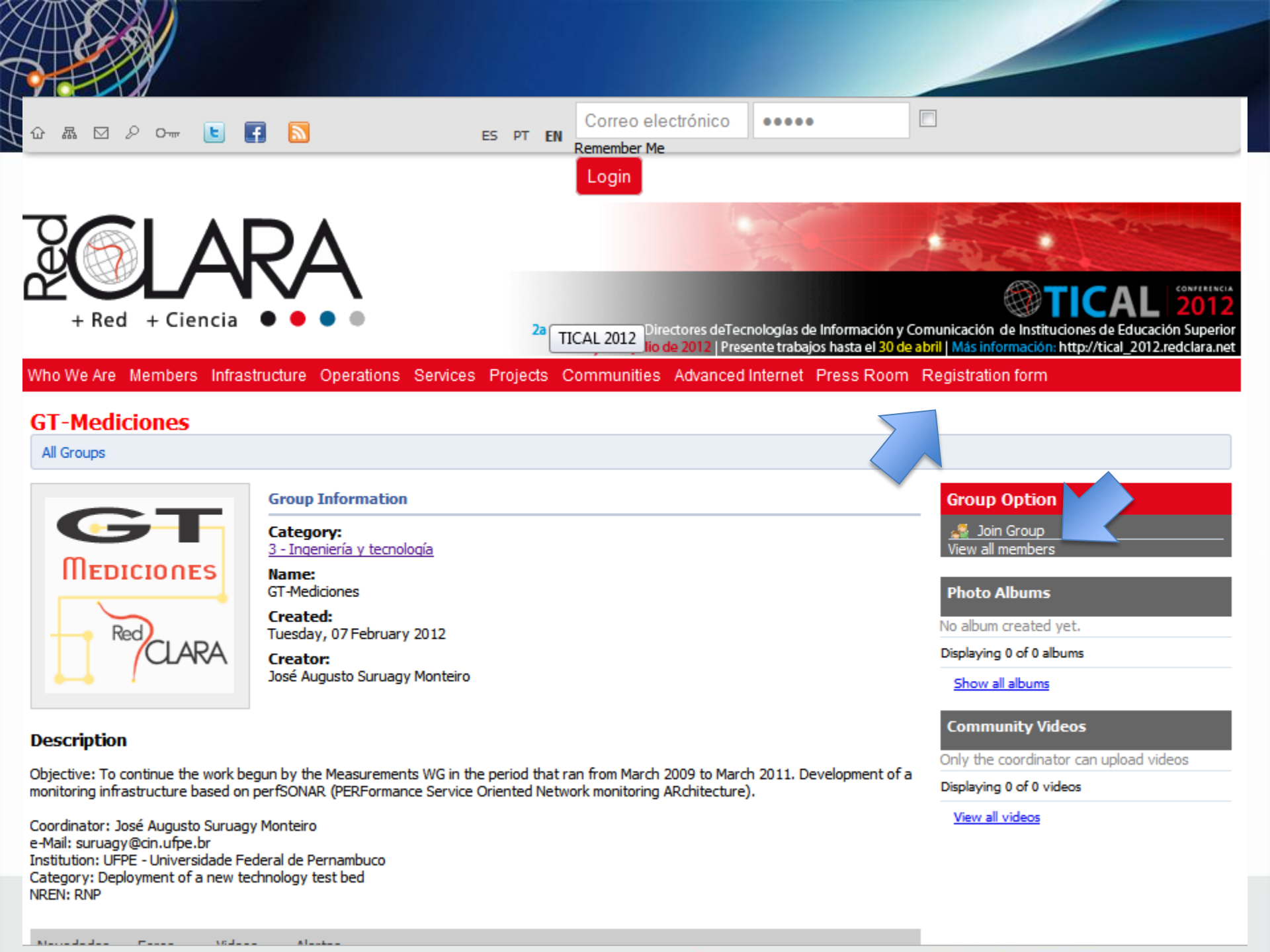
- MonGISELA Portal can be extended to report our Measurement WG collected data.
- A report was generated on the experiences with perfSONAR-MDM and the pS-Performance Toolkit.

Tools Versions

- BWCTL
  - MDM: version 1.2a
  - psPT 3.2.1.1 (MonGISELA): version 1.3
  - pSPT 3.2.2: version 1.4 – Added support for -6 and -4 flags to explicitly set IPv4/Ipv6 behavior
- OWAMP
  - psPT 3.2.1.1 (MonGISELA): v3.2rc2
  - pSPT 3.2: v3.3 – Added support for -6 and -4 flags to explicitly set IPv4/Ipv6 behavior

WG Ways of Communication

- Communities in RedClara's site (started on 07/02/12)
  - GT-Mediciones (http://www.redclara.net/index.php?option=com_community&view=groups&task=viewgroup&groupid=100&Itemid=543&lang=es)
  - To join the group it is necessary to register.
- Wiki (started on 07/02/12):
  - http://www.redclara.net/wiki/gtmediciones
  - To view and edit is also necessary to register first.


Correo electrónico
ES PT EN
Remember Me
Login
Red CLARA
+ Red + Ciencia
TICAL 2012
Directores de Tecnologías de Información y Comunicación de Instituciones de Educación Superior
Presente trabajos hasta el 30 de abril | Más información: http://tical_2012.redclara.net
Who We Are Members Infrastructure Operations Services Projects Communities Advanced Internet Press Room Registration form
GT-Mediciones
All Groups
Group Information
Category:
3 - Ingeniería y tecnología
Name:
GT-Mediciones
Created:
Tuesday, 07 February 2012
Creator:
José Augusto Suruagy Monteiro
Group Option
Join Group
View all members
Photo Albums
No album created yet.
Displaying 0 of 0 albums
Show all albums
Community Videos
Only the coordinator can upload videos
Displaying 0 of 0 videos
View all videos
Description
Objective: To continue the work begun by the Measurements WG in the period that ran from March 2009 to March 2011. Development of a monitoring infrastructure based on perfSONAR (PERFormance Service Oriented Network monitoring ARchitecture).
Coordinator: José Augusto Suruagy Monteiro
e-Mail: suruagy@cin.ufpe.br
Institution: UFPE - Universidade Federal de Pernambuco
Category: Deployment of a new technology test bed
NREN: RNP

José Augusto Suruagy Monteiro

- Inicio
- Mi perfil
- Crear nuevo álbum
- Ver/Gestionar imágenes
- Mensajes
- Subir Archivo
- Mis comunidades
- Enviar sugerencias
- Mis videos
- Buscar usuarios
- Mi bitácora (Blog)

Miembros Conectados

GT-Mediciones

Todas las comunidades | Mis comunidades | Invitaciones pendientes | Buscar | Crear grupo

Información sobre la comunidad (Usted es de la comunidad de administradores)

Categoría:
3 - Ingeniería y tecnología

Nombre:
GT-Mediciones

Creado el:
Martes, 07 Febrero 2012

Coordinador:
José Augusto Suruagy Monteiro

Descripción

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Novedades | Foros | Videos | Alertas

Novedades

Confirmación Reunión GT-Mediciones (23/05 16:30 UTC-3)

Martes, 22 Mayo 2012 por José Augusto Suruagy Monteiro

Hola amig*s,

En esto miércoles (23/05) tendremos una reunión por Conferencia Web del GT-Mediciones a las 16:30 (UTC-3). Todos están invitados!

La URL es: http://webconf2.rnp.br/mon (atención porque esta URL es diferente de las utilizadas en otras ocasiones).

Servicios para comunidades
- Wiki de la comunidad
- Oportunidades de financiamiento
- SIVIC
- VC Espresso
- RedCLARA Ve
- Gestor de Eventos y Actividades Académicas
- Cursos
- Busco socios

Información de la comunidad
- Ficha técnica de la comunidad
- Miembros de la comunidad

Opción de comunidad
- Ver todos los miembros
- Enviar correo electrónico a los miembros
- Crear noticia
- Crear discusión
- Crear galería
- Añadir video
- Invitar contactos en RedCLARA
- Desvincularse

Álbumes de fotos

No ha creado álbumes

Mostrando 0 de 0 álbumes

Mostrar todos los álbumes

Videos de la Comunidad

Solo los coordinadores pueden subir videos

Mostrando 0 de 0 videos

Ver todos los videos

Current Community Members

- Alex Moura
- Andres Leiva
- Carlos Gonzales
- José Suruagy (2x)
- Maria José
- Nidia Ximena Robles
- Seg RedCLARA
- Thomas Fryer

Página Principal

Contenido [ocultar]

1 Goals
2 Long Term Vision
3 Tasks
4 Meetings
5 GT-Mediciones Período 03/2009 - 03/2011

Goals [editar]

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- Deployment of monitoring nodes in RedCLARA's backbone
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Tasks [editar]

navegación
- Página Principal
- Portal de la comunidad
- Actualidad
- Cambios recientes
- Página aleatoria
- Ayuda

buscar
Ir Buscar

herramientas
- Lo que enlaza aquí
- Cambios relacionados
- Subir archivo
- Páginas especiales
- Versión para imprimir
- Enlace permanente

WG Ways of Communication

- AP (Action Point):
  - Everyone interested should register in RedClara website and request participation in the “GT-Mediciones” community.

Measurements WG
(GT-Mediciones)

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