# Architecting for Disaster Preparedness

Provides Relief Plus Tool Suite (PRP)

Prepared for: NDIA Conference 24 October 2012



#### **AGENDA**

- PRP Suite
- A Look at the Assessment of Disaster Readiness Tool (ADRT)
- Conclusion



#### **PRP End Goal**

- The PRP Tool Suite is now being developed and customized by SPEC Innovations for National and International Entities (Localities, Providences, States, Regions, Nations, Corporations and other organizations...) to provide them the means to assess their readiness and resiliency to deal with natural and man-made disasters
  - the original version of the tool was developed, under a different name, for the Army to assess Partner Nations' readiness and resiliency and that contract has now been fulfilled
- The end goal is to provide an objective assessment of an Entity's readiness and resiliency level that is then used to help create an annual development plan for the Entity that will assist them in achieving self reliance during times of disasters.
- The tools are for use by the Entity to create development plans that can be customized by the Entity based on their own assessments, resources and capabilities.
- A Ready and Resilient Entity will help reduce the disaster's impact on their citizens and decrease their disaster response and recovery dependency on other governmental and non-government organizations.

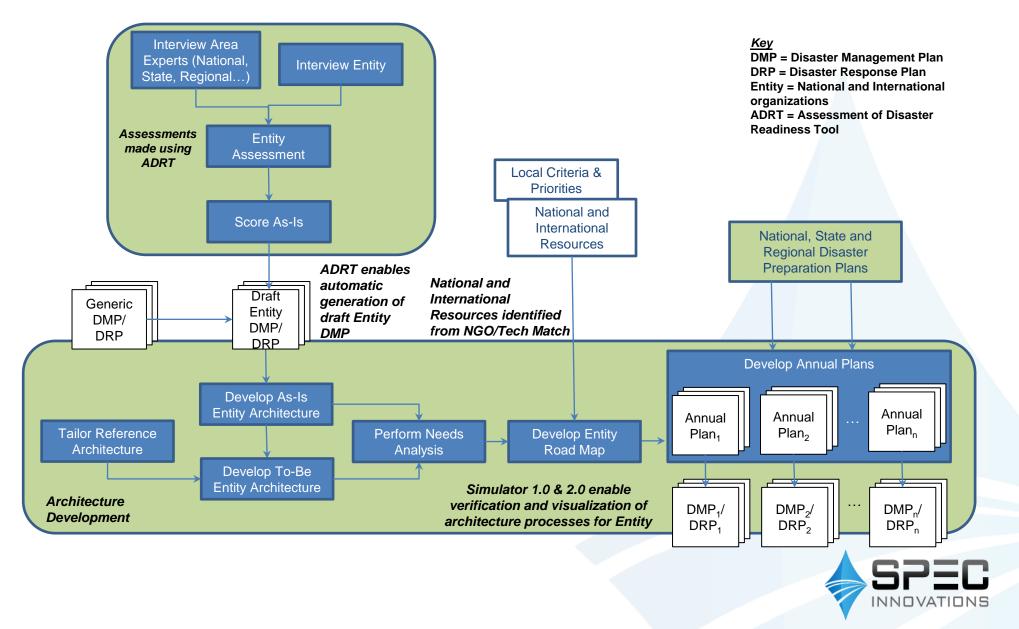


#### **PRP Tool Suite**

- Provides relief.org: The centerpiece of the PRP project providing access to disaster data, the PRP Tool Suite and third party tools
  - Integrated Data: Provides relief.org will integrate data from commercial, government and non-profit sources to give context to disaster information
  - Integrated Tools: Providesrelief.org will serve as the hub for the PRP Tool Suite and other third party tools



### **Applying the PRP Suite of Tools**



#### **ProvidesRelief.org Website**

ProvidesRelief.org Providing you with the tools to make a difference.				
Home Recent News Tools Contact Us				
The next version of ADRT is coming soon!	<section-header>         Bit District State         State         State         State         S</section-header>			

**Recent News** 

ADRT is coming soon with new graphics, new questions, assessment sharing, improved links to Innoslate (database and simulator), improved user interface and other requested features.

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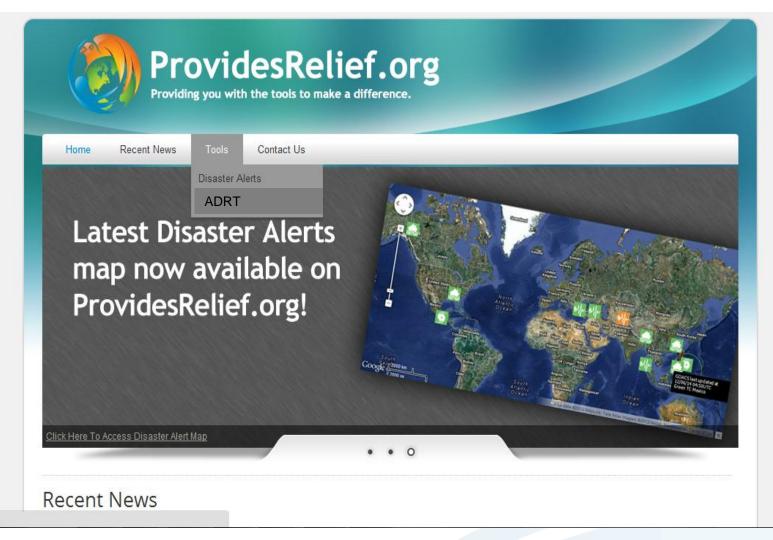
Site Developed by: SPEC Innovation

#### Features:

- Main Page Slideshow
- Recent News Feed
- Contact Us Form
- ADRT Banner Slide and Links
- NGO/PVO Match Banner Slide
- Latest Disaster Alerts Map Banner and Tool
- <u>www.providesrelief.org</u>



#### **ProvIDESRelief.org Tools**





www.providesrelief.org/#

#### **ProvidesRelief.org Website Prototype**

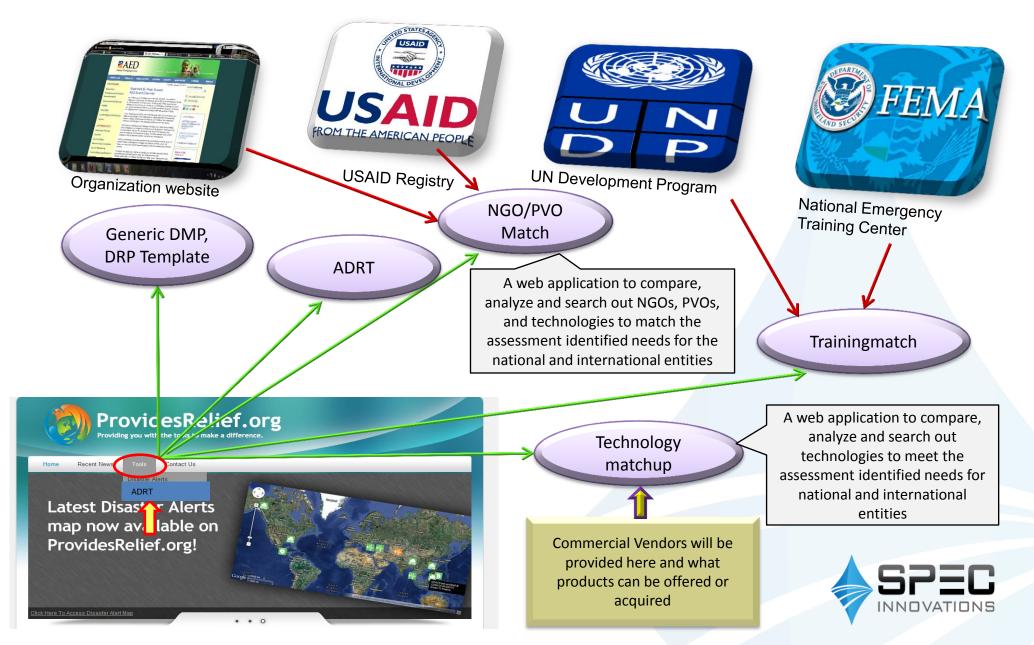


Latest Disaster Alerts Map Tool mirrors output of <u>GDACS</u> website. (shows updated alerts for floods, hurricanes, tropical storms, and earthquakes)

Source: GDACS

Edit

### **Tool Sources**



### **Tools - ADRT**

<u>ADRT</u>: A readiness and resilience level assessment tool for national and international disaster preparedness

- "Infinite Scalability": ADRT currently resides in the cloud environment and offers scalable assessments
- Collaboration: Will offer assessment sharing capability
- Reports/Export: Will offer DMP and DRP reports, as well as exportable results
- Interface Improvements: Interface will be optimized for the ADRT assessments
- Desktop version: Current desktop version allows portability where internet service is not available. Assessments will be performed and then uploaded to the cloud environment
- Assessment questions are tailor-made for the type of assessment being performed





ADRT ProvidesRelief.org

Readiness and Resilience Assessment Tool

John Viar [Sign Out]

1. Planning	Start New Assessment: Readiness and Resilience Assessment Tool for Entities
2. Preparation	This assessment is composed of 206 questions that will take approximately 3 hours to complete, however your time may vary.
3. Identification	Please read through every question completely and answer thoughtfully. If you are unable to complete the assessment all at once you may stop and resume the assessment at a later time.
4. Response	Begin
5. Recovery	
6. Risk Management	

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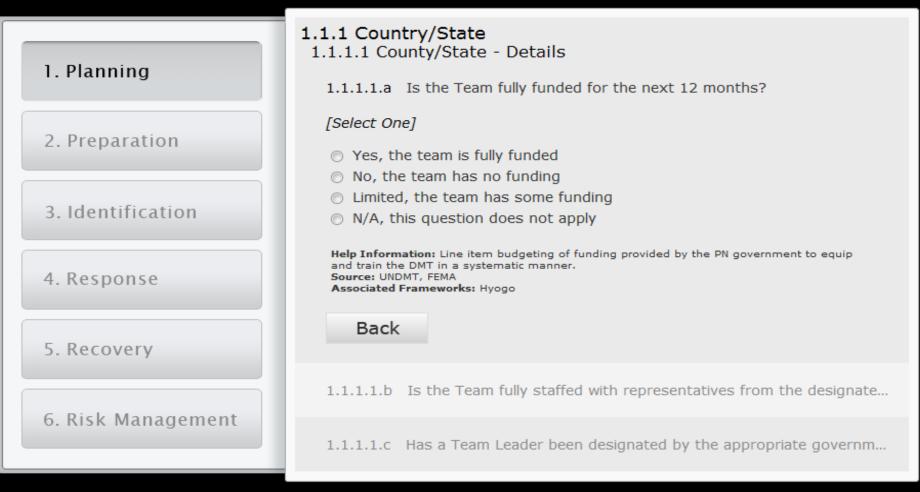


ADRT Pr

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Readiness and Resilience Assessment Tool

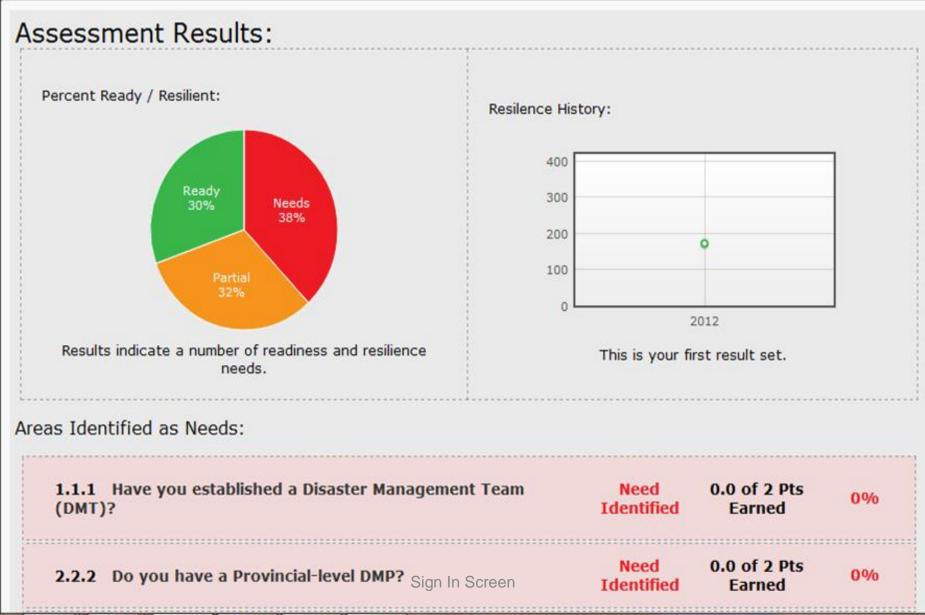
Gregory Riley [Sign Out]



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John Viar [Sign Out]



#### **Tools - Discrete Event Simulation**

- Discrete Events Simulation: An national and international disaster scenario simulator
  - Simulator 2.0: An upgrade to the 1.0 simulator that provides model animation and analytic reports
  - "Infinite Scalability": The simulator spawns servers and resources on demand to simulate systems of systems
  - Live Communication: Simulation results are pushed from the cloud to the client's computer directly in real time
  - Complex Construct Support: Syncs, Loops, and Decision points are supported



## Tools – NGO, Tech & Training Match

- Compare and analyze commercial technologies, and PVOs' and NGOs' capabilities, equipment and services and training sources that could meet assessment identified needs for the national and international entities
- Scalable: Cloud integrated for ondemand scalability

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🏫 ABOUT CONTA	CT PRIVACY					
Technologies List						
Actions	Delete Approve Deny		Page	1 of 25 <u>Next</u>		
Most Recent	Title	User	Status	Date Modified		
View PDFs	Paladin Network Detection and Analysis Tool	morrison	Approved	08/16/2011		
Search Uncategorized	AN/WQX-2	mcampbell	Approved	08/15/2011		
Upload Technology List Your Technologies	Structured Application Protection Process (SAPP)	anpotter	Approved	08/15/2011		
	Armor for Ballistic, Blast, and IED protection	DynamicDefense	Approved	08/15/2011		
	Parcel X-Ray Scanner	mcampbell	Approved	08/15/2011		
<ul> <li>Command &amp; Control</li> </ul>	Deployable Cyber Defense System (DCDS)	anpotter	Approved	08/15/2011		
<ul> <li>Area Wide Alert/Notification</li> <li>Operations Center</li> <li>Decision Making System</li> <li>C41</li> </ul>	🔲 Boat-Trap	mcampbell	Approved	08/15/2011		
	Integrated Swimmer Defense	bblackmon	Approved	08/15/2011		
	SentinelNet Software	mcampbell	Approved	08/15/2011		
	Silver Shroud	mcampbell	Approved	08/15/2011		
<ul> <li>Installation Protection</li> </ul>	Underwater Sentry	franklinsu	Approved	08/15/2011		
<ul> <li>Waterside Protection</li> </ul>	📃 Render Safe Plasma Program for IEDs, Landmines,	mcampbell	Approved	08/15/2011		
Threat Awareness	Flyswatter	mcampbell	Approved	08/15/2011		

## Existing Resource for Modification to the Cloud Environment



### **NGO/PVO Data Elements**

- Organization Name
- Location
- Years in service
- Functions of expertise (Initially using USAID registry) such as Basic Health
  - Delineated to specific levels of expertise e.g., First Aid, CPR, Simple fractures etc...
- Areas/Regions of Operation
- Languages Spoken
- Funding Source
- Contact information including:
  - Website
  - Phone number
  - Fax number
  - Physical Address



#### **Tools - Management & Response**

#### <u>DMP</u>

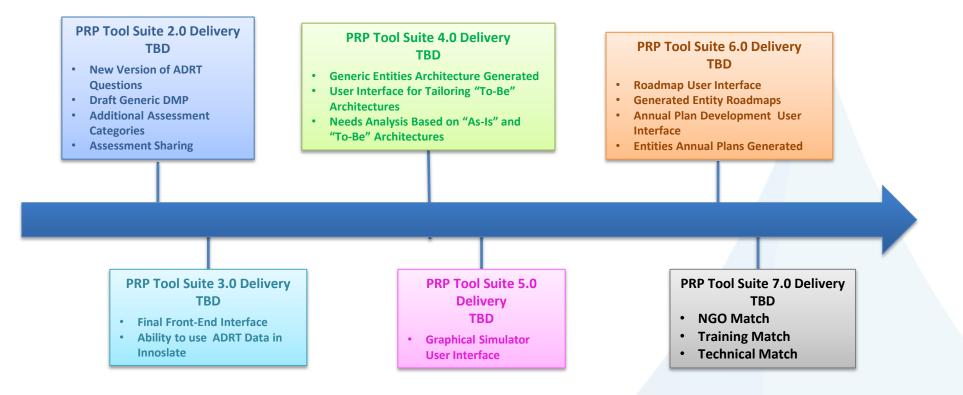
- Generic Template for Pre-Event Planning and Long Term Preparation
- Planning for every type event that can occur
- Works with DRP for pre-event steps: Identify Threats and Assets and Pre-Occurrence Preparation
- Post event planning is for response planning
- Tailorable to meet specific events commonly experienced by Entity

#### <u>DRP</u>

- Generic Template for post event responses including initial damage assessment
- Overlaps some pre-event planning steps from DMP: Identify Threats and Assets and Pre-Occurrence Preparation
- Identifies resources needed for every event that can occur
- Can be tailored by Entity to allocate common/trusted resources used by Entity



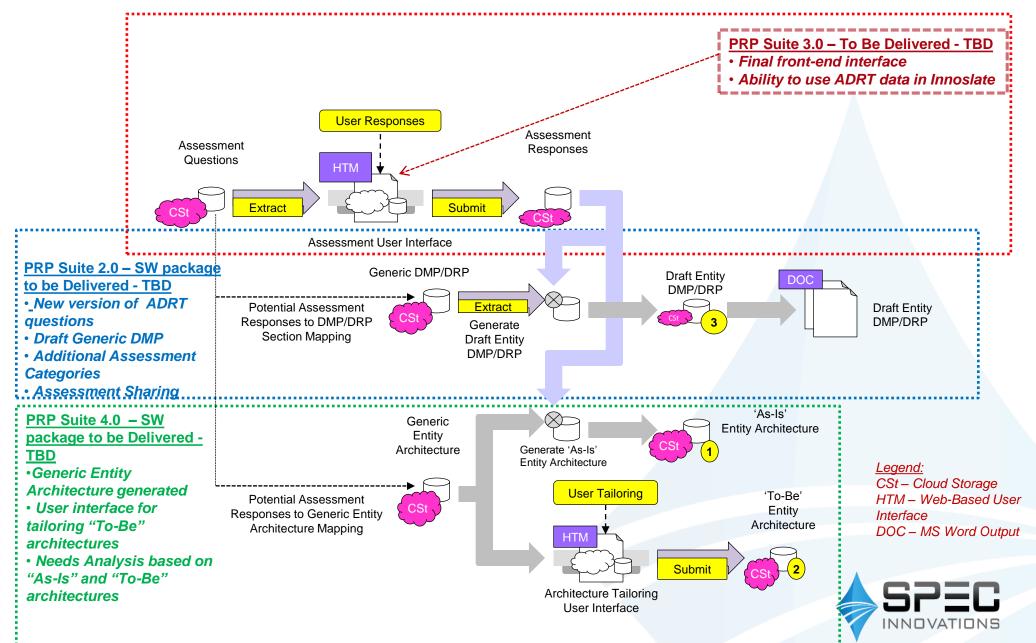
### **PRP Tool Suite Project Schedule**



Note: The deliverable dates are based on funding for the project.



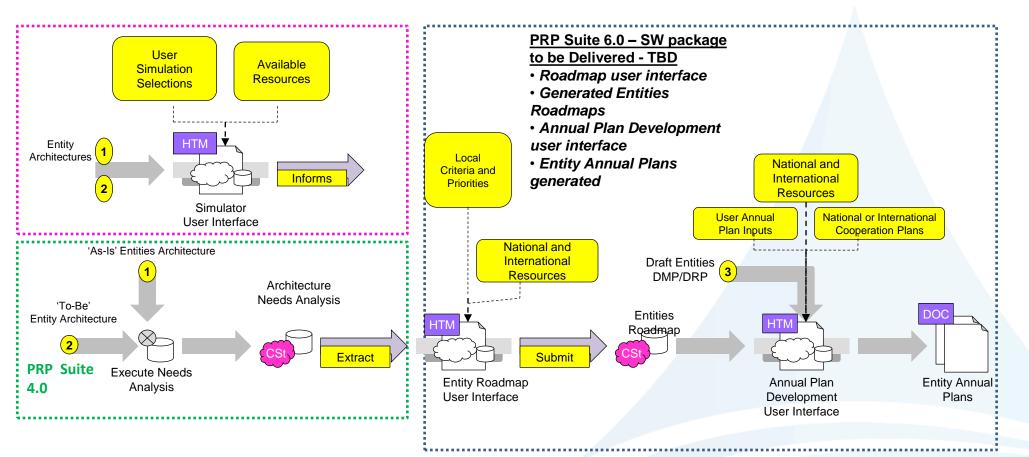
#### PRP Suite Software Architecture (1 of 2)



#### PRP Tool Suite Software Architecture (2 of 2)

#### PRP Suite 5.0 – SW package to be Delivered - TBD

Graphical Simulator User interface



<u>Legend:</u> CSt – Cloud Storage HTM – Web-Based User Interface DOC – MS Word Output



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# **Questions?**

