Creating a CA Nimsoft Monitor Super-Package March 2014

> agility made possible<sup>™</sup>



### **Background: Distributing probes**

- Probe distribution moves the probe from the archive to robot.
  - Creates the probe directory (in file structure and in Manager)
  - Creates a .cfg file from a .cfx file
  - Does any dependency checking
  - Does any requested pre/post processing

- You can save a configured probe into the archive as a simple way to replicate a probe configuration, e.g.,
  - Configure ntperf
  - Drag ntperf back into the archive with a new name
  - Distribute your ntperf modified probe



## The Package Editor

💺 giants . nims	oft.com - Remote	e Desktop							_0	
New Package					×	]	_			
Properties —										
Name			Author	jkaplan						
Description			Date	9/11/2009						
Copyright	(C) Copyright 2009		Version	1.0	No direct install	ib Ve	er. Gro	up License 1 🔺		
Copyright Group			✓ Build	1	License required			eway DEMO Ni-		
								eway DEMO Ni eway		
OStype							SLI			
	💌 OS		-				Sy .	View		
Files Probe	e definitions Enviror	- ment variable		cies Miscellane	ous		Sy Ap	Refresh		
il	· · ·		, ·	moconano			Se	New		
k Name	Туре	Mode	Path		·			Edit Delete		
5							Ga.			
							Ap Sy	Copy Rename		
								Configure Archived Configur		
									auon	
						F		Distribute View Distribution Progress		
Ok	Cancel				Help	unt	Suppre			
						53	wotan-	Import Download		
•	ule#.FreeMemory on			01.server1 is nov	v 20413 (thresh	5	192.16			
	_enabled. Variable: lo e_usage_rate. Perce			4		53 53	wotan- wotan-	Explore Internet Archive Product Information		
. –	e_usage_rate. Perce ule#.HeapSize on 19	-			)778 (threshold	53	192.16	Internet Archive Mode		
ie HAManager.thre	ead.pool.PoolSize on	192.168.128.	15.wotanNode0		•	53	192.16			
otan-guery cache	usage rate. Percen	tage of cache	in use 8.62%.			53	wotan-	Print Preview		> >



#### **Section Notes**

🔩 giants.nimsoft.com - Remote Desktop					
New Package		X		_O×	
_ Properties	Author ikaplan				
Name	I F				
			b Ver. Group	Lizzan 1 A	
Cop Rename current section		No direct install 🔲	b Ver. Group Gateway	License 1 A	
Grou Delete current section	Build 1	License required 🔲	Gateway	DEMO NI	
Add section			Gateway		
Add section  Add section left  Gran OStype  OS		1	SLM		
arri OStype OS	<b>v</b>		System		
par Files Probe definitions Environment variables	Dependencies Miscellaneous	1 II	System Application	DEMO NI	
	· · ·	<u> </u>	Service		
ich Type Mode P	Path	· [] ]			
	×		Gateway		
			Application System	DEMO Ni	
	Cancel		System		
m			Tot: 2	.75, Sel: 1	
			,		
1e Ok Cancel		neib []	unt Suppression Key	Host Nar 🔺	
vo <u>J</u> The jvmRuntimeModule#.FreeMemory on 192.168.128.15	- webeeNede01, convert is now 20		53 wotan-innodb_cach 5 192.168.128.15.jv	wotan wotan	
votan-slow_queries_enabled. Variable: log_slow_queries		•	5 192.100.120.15.jv 53 wotan-slow_querie	wotan	
votan-myisam_cache_usage_rate. Percentage of cache i			53 wotan-myisam_cac	wotan	
he jvmRuntimeModule#.HeapSize on 192.168.128.15.w	otanNode01.server1 is now 8077	8 (threshold	53 192.168.128.15.jv	wotan	
he HAManager.thread.pool.PoolSize on 192.168.128.15	•		53 192.168.128.15.H	wotan	
votan-query cache usage rate. Percentage of cache in	use 8.62%.	1111	53 wotan-query cach	wotan	× >



#### Creating a "Superpackage" - example

- This is convenient if you want to distribute *multiple* probe configurations to a number of hosts as <u>one</u> package and in <u>one</u> operation. These hosts will then receive the same probes with identical configuration parameters creating baselined configurations for process control.
- Note:

When including the cdm probe in a package, you <u>must</u> ensure that the target computers have the same disk partitions as defined in the cdm configuration file (*cdm.cfx*) distributed with the package unless you instrument with discovery commands (more to come later).



In this 'follow-along' example, we will make a distribution called Superpackage containing configuration for the *cdm* and the *processes* probes.

M & A   III. 🏛 🎒	88			-
△ Description		Status 🗸	Version	Web V
sgi NimBUS Robot for SGI I	RIX 6.x	ок	2.26	2.26
	5olaris 2.x (5	ок	2.26	2.26
		OK	2.26	2.26
View 🕨		OK	2.64	2.64
Refresh	pn	ок	1.03	1.03
engine	ice Data	Local	4.22	4.11
		Local	3.03	
Lucin		Local	1.09	
engir Delete	; from QoS	Local	4.20	4.18
Distribute		Local		
	nd Redistrib	Beta	3.34	
	-			•
Download				►
ickage Explore Web Archive	-		Tot: 15, Sel: 1	1 19%
		-		
×	-   M & A	📶 🏛   😂   🖶	5	
Name Print Preview	Message			14
95.55. Print	193.85.55.123	Connection to 193.85.		failed
- Law				
	solsparc NimBUS Robot for Sun : trust View View Refresh engin Engin Engin Delete Distribute View Progress Download Explore Web Archive Release Note Print Preview	solsparc NimBUS Robot for Sun Solaris 2.x (5 trud4 NimBUS Robot for Sun Solaris 2.x (5 trud4 NimBUS Robot for Come of TRU64 View Refresh ice Data Refresh ice Data Refresh ice Data From Qo5 Distribute View Progress Release Note Release Note Print Preview Print Preview Print tedit According 193,85,55,123 Average (5 sam	solsparc NimBUS Robot for Sun Solaris 2.x (S OK tru64 NimBUS Robot for Sun Solaris 2.x (S OK tru64 Nime Solaris 2.x (S OK New OK Refresh OK ice Data Local Local Local Delete From QoS Local Distribute View Progress Note Print Preview Print Preview Print. Preview Print Edit Market Solaris 2.x (S OK Print Preview Print Preview	solsparc       NimBUS Robot for Sun Solaris 2.x (S       OK       2.26         trudof       NimBUS Robot for Sun Solaris 2.x (S       OK       2.26         trudof       NimBUS Robot for Sun Solaris 2.x (S       OK       2.26         trudof       NimBUS Robot for Sun Solaris 2.x (S       OK       2.26         trudof       NimBUS Robot for Core og TRU64       OK       2.64         Refresh       OK       1.03       1.03         ice Data       Local       4.22       Local       3.03         Local       1.09       ice Data       Local       4.20         Delete       if rom QoS       Local       4.20       Local         Distribute       View Progress       nd Redistrib       Beta       3.34         Download       Explore Web Archive       Message       Tot 15, Set         Name       Print Preview       Message       193.85.55.123; Connection to 193.85.55.123 (ping)         Name       Edit       Average (5 samples) memory usage is now 52%, wh

Open your local package archive, right-click in the list and select *New* to launch the NMS Package Editor.



Create the distribution package and give the package a name (e.g. *Superpackage*). You may also create a new group (e.g. Super) for the package if you choose

New Package				<u>×</u>
Name	super-package	Author	rhansen	
Description		Date	22.06.2004	
Copyright	(C) Copyright 2004	Version	1.0	No direct install
Group	Super	▼ Build	1	License required 🔲
Files Prob	e definitions Environment -	· .	icies Miscellar	neous
Name	IypeMode	e Path		<u> </u>
Ok	Cancel			Help

Click the OK button, and the new package will appear in the list in the your package archive.



#### Let's begin with the *cdm* probe...

# Drag and drop a **configured** cdm probe from your robot into the package archive.

NimBUS Manager File View Security Tools Window	Help
NimBUS  NimBUS Domains  Development  Asker  DetaBase  Software  Software  Application  Application  Catevery  NimpUS  Software  Softwar	A      A
fest	Image: Weight of the second

📽 cdm: [/Hob	bs/Dan/dhol	obs-lt2/cdm]		X
Setup	Status	Multi CPU	Advanced	٦
CPU usage (%)	Memo	ry usage (% of 3.3 GB)	Paging act	ivity (Pg/s)
100 75 50 25 0 High 90 5 Low 75		s o ph 90 ÷ Averag		400 ÷ Average
Disk usage				
Filesystem	Туре	Disk	Total	Free Used %
	Local	\Device\HarddiskVolu	ume1 52225	13071 75
OK Cance	Apply			Update <u>H</u> elp



Ensure that **Configuration Only** is selected, and rename the package to something like '*cdm-cfg'*. Click the OK button, and the *cdm-cfg* package will appear in the list in your package archive.

Update Packages		×
Package name cdm-cfg	Probe cdm	Package exists in archive Yes
, Configuration Only	Rename	Cancel



Locate and select the cdm-cfg package from within the package archive, right-click and select *edit* (or double click)

Package: cdm	-cfg			×				
Properties								
Name	cdm-cfg	Author	Generated by dis	tsrv				
Description	CPU, Disk and Memory performa	anc Date	22.06.2004					
Copyright		Version		No direct install				
Group	System	▼ Build		License required 🔲				
Files Probe	Files Probe definition							
Icdm.cfx     config     OF       Add file     File properties       Remove file       View file contents       Edit file       Save file as								
Ok	Cancel	\ <del>\</del>		Help				

Under the Files section, right-click the entry for cdm.cfx, select *Save file as...,* & save the file to a destination of your own choice (just remember where you stick it, you will need the file later in the example).



#### The processes probe

#### And now onto the processes probe:

- Drag and drop a configured processes probe from your Robot into the package archive. Ensure that *Configuration Only* is selected, and rename the package to something like '*processes-cfg'*.
- Click the OK button, and the processes-cfg package will appear in the list in the package archive. Locate and select the processes-cfg package in the package archive, right-click and select edit (or double click).
- Right-click the file processes.cfx in the list, select *Save file as...,* and save the file to a destination of your own choice (maybe put it in the same place as before?).



Locate and select the super-package in the archive, right-click and select *Edit*. You are now going to define the contents of the super package.

File View Security Tools Window	Help						
🔳 🔳 📽 🖦 🖦 🕌 🚆	🔁 🔜 👬						
🧟 NimBUS	🖥 🔂 🗛 🕯	2 PA	In. 🏛   😂   🖪 🖷	5			
🖃 🗓 NimBUS Domains 🛛 🔺	Name $\Delta$	Desci	ription		Status	∇. Version	Web Ve
🖻 🚰 Development	🔒 install_tru64	NimBl	US Robot for Compag TRU6	64	ок	2.26	2.26
🗄 📲 Asker	🔒 nas	Alarm	Server		ок	2.64	2.64
	🖸 ovnnm	Орег	View NNM integration		ОК	1.03	1.03
🕀 🎉 phoenix	🗬 cdm-cfg	CPU,	Disk and Memory performa	ance	Local		
🛨 📲 wsadmin	\mu data_engine	Mana	ges Quality of Service Data	a	Local	4.22	4.11
🖃 📲 wsrune	distsrv	Distri	bution Server		Local	3.03	
🖻 ··· 🌆 wsrune	🛱 httpd	NimBl	JS Web Service		Local	1.09	
Application	🔒 ntevl-cfg	Wind	ows NT event log watcher		Local		
Gateway	teport_engine	Gene	rates HTML Reports from (	DoS	Local	4.20	4.18
Network	sammy	Test	probe	•	Local		
NimBUS	super-system		View 🕨		Local	1.0	
SLM	📫 hub	Mes	view ,	- rib	Beta	3.34	
System			Refresh				E F
Test	View: Packages i	n local -		-		Tot 18, 9	iel: 1 222
🖅 📲 wsstian		mocar	New			110010, 0	
		/ *	Edit	1 2	h. 🏛	a 🖥 🕹	
🗄 📲 xpthen	I., Host Name		Delete	_		_ , ,	
🛨 💃 Y-332			Distribute				
	193.85.55.12	3	View Progress			o 193.85.55.123 (p	
	laptop1	-		- · · ·		on C:\ is now 478	
🚊 👷 wsrune	wsrune		Download	R(800	9): The browse	er was unable to pr	omote itsel
- 🎒 Application			Explore Web Archive			T-1	
🔄 📲 Database 💆			Release Note				: 54, Sel: 0
Login: /Development/wsrune/wsrune/	'hub User: administr	ator [ -		_alt 3		54 !	
		_	Print Preview				
			Print				
				-			

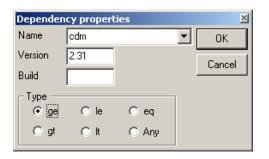


Click the tab for Ostype and select *Add section* to make a section. For distribution to <u>windows</u> computers, give the section the name win32 and select *Ostype* = windows and OS = win32.

	Package: supe	er-package			<u>×</u>
	Properties —				
	Name	super-package	Author	rhansen	
	Description		Date	22.06.2004	
	Copyright	(C) Copyright 2004	Versio	n 1.0	No direct install
	Group	Super	▼ Build	1	License required 🔲
Copyright [C) Copyright 2004 Group OSI Rename current: section Defete current: section Rename current: section I variation I v	Files Probe	idows S OS Win32 e definitions Environ Solaris Win32 Win35 Win38 Win15 Win15 Cancel		encies Miscellan	eous



#### **Step 2 - Set dependencies for the probes**



Click the *Dependencies* tab, click in the window and select *Add dependencies*. Type the probe name (cdm) and optionally the Version number.

<u>Just probe name</u>, the package will only distribute computers where the probe does <u>not</u> exist.

<u>If you include the version number</u>, the package will only distribute to computers where the probe does not exist, and to computers where the probe exists in an older version.

Section name	×	
Section name	cdm-cfg	ОК
Section type : C		
Probe name	cdm	Cancel

Make a new tab called cdm-cfg. Select the option *Configuration of existing probe* and type *cdm* in the *Probe name* field. Click the OK button.

Do the same for the processes probe.



#### **Step 3 - Add the .cfx files**

Package: supe	r-package			×				
Properties								
Name	super-package	Author	rhansen					
Description		Date	22.06.2004					
Copyright	(C) Copyright 2004	Version	1.0	No direct install				
Group	Super	▼ Build	1	License required 🔲				
OStype	OStype OS Type: Configuration							
Name	Type Mod	e						
	Add file File properti Remove file	==						
	View file con Edit file Save file as.							
Ok	Cancel			Help				

Select the cdm-cfg tab and click the *Files* tab. Right-click in the window and select *Add file*.

File properties				×
Name			Browsel	ОК
Туре	ascii	•	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Cancel
Mode	0644	•	Check CRC	

Select *Browse* to find the cdm.cfx file you saved in earlier and click the OK button.

Select the *processes-cfg* tab and perform the same steps for the processes probe.



Finally, click the OK button in the super-package dialog to finish the procedure.

Now the super-package (including the two probes with their configuration parameters) can be distributed, using drag and drop.

The package can be distributed to:

- a single Robot
- a Hub, including all underlying Robots
- a Domain, including all underlying Hubs and Robots



### **Tracking your results**

- Inspect the Robot you deployed the super package to and check to ensure the changes took.
- If not, inspect the distsrv log and then the .cfx to try and troubleshoot what went wrong.



### Modifying disk discovery

- Create a template that will discover all disk drives and enforce standard configuration on them (without imposing drives that DON'T exist)
- Syntax on following slide



#### **Disk config example**

<disk> overwrite

interval = 15 min

samples = 4

<alarm> overwrite

active = yes

<connections> clear

</connections>

<fixed> clear

</fixed>

</alarm>

<fixed\_default> overwrite

active = yes

qos\_disk\_usage = yes

qos\_disk\_usage\_perc = yes

percent = yes

<error> overwrite

active = yes

threshold = 10

message = DiskError

</error>

<warning> overwrite

active = yes

threshold = 15

message = DiskWarning

</warning>

</fixed\_default>



</disk>

Copyright © 2012 CA. All rights reserved.

# **Request.cfg** (optional when using script/silent installs)

 Create a simple text file with the following format called "request.cfg" and place it in the Nimsoft directory to force the robot to pull specifically referenced probes down when the robot starts up (be sure it has access to a local distsrv)

<distribution request>
 packages = cdm, processes, etc
</distribution request>

 Use this in conjunction with new robot deployment or to ensure configuration will be maintained



#### Multiple O/S platforms and O/S bits

- You can either create multiple packages with each os|ostype specified, (e.g for 32-bit and 64-bit platforms)
- Or blankout os and ostype both to make it platform-neutral
- Stay aware of probes which are OS dependent, e.g cdm. So, for example, if you build one with win32 and win64, you can stack multiple \*.cfx files under each O/S tab
- Make sure you import.cfx's from the appropriate robots, e.g., Windows, Unix, Linux versions, etc.) ...

