



# Delivering New InSight into NonStop Analysis

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# TCM – Early Years

- Focus on proximity, seamlessness
- Feel like another part of the team
- Highly responsive
- Always available
- Quick to adapt
- Combine NonStop expertise, with exemplary Service Management





# TCM today



Systems Management



Security



Monitoring and Ops



Compliance



Data Replication



Application Modernisation



Performance Analysis



Resourcing



Health Checks



And more...





# TCM today

- Dedicated NonStop service experts
- Design and deliver bespoke service solutions to NonStop Customers around the globe
- Onsite and Remote services delivered via Centre of Excellence based in Scotland
- Never lost a Customer, never failed an SLA
- Flexible, responsive, adaptable, trusted partner, part of the team
- HPE silver partner
- Preserving NonStop knowledge
- TCM Video: link / [www.tcm.uk.com](http://www.tcm.uk.com)



**Hewlett Packard  
Enterprise**





# Getting Insightful

Andy Vasey, TCM





The most dangerous phrase in the English language is:

“we have always done it this way”

- Dr. Grace Hopper





# TCM InSight

## Bringing Your NonStop into Focus





# INTRODUCING TCM InSight

## What is InSight?

- TCM InSight is a quick, snapshot assessment, aimed at providing a clear and accurate understanding of your NonStop systems and setup





# INTRODUCING TCM InSight

## What is InSight?

- In essence, a short yet comprehensive audit
- Lasting only a few days
- With minimal input from Customer
- Designed, built and delivered in collaboration with HPE



**Hewlett Packard  
Enterprise**



# HOW IT WORKS

## GATHER DATA

- Short questionnaire filled out by customer
- Simple 'press of a button' script run by customer will produce majority of data accessed by TCM via secure HTML file
- Follow-up questions for context/understanding via email or video call

## ANALYSE DATA

- TCM Experts across all fields of NonStop will review data and compare with best practice

**Snapshot for \TCMVNS**

**PEEK Status**

PEEK - T9050L02 - (15JUN21) - (30APR21) - (BAS) SYSTEM \TCMVNS  
(C)1981 TANDEM (C)2004-2019 HEWLETT PACKARD ENTERPRISE DEVELOPMENT LP

SYSTEM \TCMVNS  
28 MAR 2022, 11:16\_\_ELAPSD 258:54:51\_\_CPU 0(NSV-D/vNS-EE)\_\_Num IPUs = 2

TIME:	PROCESSBUSY TIME	INTERRUPT TIME	IDLE TIME
	0:15:14.509 0.09%	0:06:57.723 0.04%	258:32:31.363 99.85%

	MAXIMUM USED	CURRENT USAGE	# CONFIGURED	# OF FAILURES
TLE	60	319	30000	0
PCB	24: 220	19844	0:	0
NRL	338	175	0:	0
PTLE		4	0:	0
PME		25	160	0
SHM		0	100	0
SEM		0	30	0

	EXTPOOL	MAPPOOL	SEG TBL	SIZE	CUR	INIT	MAX	USED	MAX.FRAG	CUR.FRAG
				2048KB	2048KB	2048KB	1757KB	1840KB	1	1
				2048MB	2048MB	12MB	12MB	12MB	1	1
				512MB	512MB	44MB	-	-	1	1

POOL64 USAGE	TOTAL SIZE	ALLOCATED	LOCKED/WIRED	SEGMENTS					
	INIT	CUR	MAX	CUR	MAX	CUR	MAX	CUR	MAX
FLEXPOOL(32)	2048KB	2048KB	1757KB	1840KB	1776KB	1840KB	1	1	1
FLEXPOOL64	2048MB	2048MB	12MB	12MB	12MB	12MB	1	1	1
MAPPOOL64	512MB	512MB	44MB	-	-	-	1	1	1

PAGES:	PHYSCL	SWAP	MIN	PREERED	UNDUMPED
(16Kb)	4163072	4163053	3819648	270	0

PAGES:	LOCKED	LOCKED(KSEG0)	LOCKED(KSEG1)
(16Kb)	282017/3772767	3017/12274	22549

TOTAL	FAULTS	ALLOCS	DISKREADS	DISKWITES	MUTEXCRAX
(per sec)	494111	877441	345944	38089	119
	0.53	0.94	0.37	0.04	0.00

TOTAL	REDHIT	REDBUSY	REDTASK
(per sec)	0	0	0
	0.00	0.00	0.00

CLEANQ:	FULLS	FRST:HITS	CLOCK:CALLS	FAILS	CYCLES	ALIASES:	FAILS
	0	0	877383	4536	0	11.67	0

Filesystem Usage

HOW IT WORKS



# HOW IT WORKS

- **Report, Rate, Recommend, Review**
  - TCM will produce a comprehensive report providing an assessment of 18 NonStop areas of interest
  - Each area will be scored using a simple traffic-light rating system providing 'at a glance' understanding
  - Findings and further recommendations will be provided, identifying the path to Best Practice
  - A follow-up review with the Customer will explore the report and provide an opportunity to discuss any findings or ratings in greater detail



## 2. Disc Configuration

### Description:

Having the correct disk configuration is essential to a smooth-running system. This includes path and cpu balancing.

### What we assessed:

We checked the disk configuration, disk cache, freespace, fragmentation and dirty reads/writes. We also checked for any documentation, evidence of daily tasks being performed and any exceptions being highlighted by the daily checks.

### Assessment:

We found a number of disks with free space less than 80%. We also found evidence of daily checklist tasks not being performed or any follow up being performed and/or reported on.

Rating:

### Recommended Action:

Perform clean-ups/archiving on the affected disks to free up some free space. Ensure that DSAP (Disk Space Analysis) is run on a regular basis alongside Disk Reloads.  
Perform a disk sizing task to ascertain whether or not more or larger disks are required.  
Ensure that processes and procedures are followed in relation to daily tasks by operations/system managers.



# HOW IT WORKS

- **Recommended Actions:**
  - No further action
  - Recommend change to process / configuration / setting
  - Recommend new product / tool / service
  - Recommend further, deeper analysis of certain area(s)





# Benefits

- ✓ Inexpensive
- ✓ Efficient use of time – results within one week
- ✓ Despite efficiency – still comprehensive
- ✓ Independent, objective analysis (not a witch hunt)
- ✓ Does not require NonStop knowledge to understand report
- ✓ Minimally invasive – touch of a button
- ✓ One-off / annually / periodically
- ✓ Tailored and scalable

# WHY GET InSight?



## Systems Managers:

- Personal development / continuous improvement
- Confirmation of competence
- Justification for recommended system improvements, training etc.



## Senior Management, looking for independent appraisal of NonStop function:

- Recently assumed responsibility for technology
- Changes in team / support function
- Wider organisational continuous improvement / compliance programs







# HOW TO GET InSight

- **Speak to TCM today, come find us at our booth**
- **Or reach out to your HPE NonStop Account Manager**





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# InSight: A Real World Example

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# Insight Snapshot Beforehand

## TCMSnaps for \PROD

SnapShot ver 1 (2023-04-10) Run time: 13/04/2023 10:00

- CPU Status
- PEEK Status
- Disk Space Usage
- Storage Management
  - Storage Pool
  - Virtual Disk
  - Clim Disks
- Disk Cache
- List of Devices
- TMF Status and Information
  - \$AUDIT\* Disk Configuration
  - \$AUDIT\* TMF Audit Files Fileinfo
- Kernel-Managed Swap Facility (KMSF)
- CLIM Information
  - CLIM Details
  - MON Details
  - PROV Details

# Insight Snapshot Afterwards

## TCMSnaps for \PROD

SnapShot ver 1 (2023-04-13) Run time: 13/04/2023 17:00

- [CPU Status](#)
- [PEEK Status](#)
- [Disk Space Usage](#)
- [Storage Management](#)
  - [Storage Pool](#)
  - [Virtual Disk](#)
  - [Clim Disks](#)
- [Disk Cache](#)
- [List of Devices](#)
- [TMF Status and Information](#)
  - [\\$AUDIT\\* Disk Configuration](#)
  - [\\$AUDIT\\* TMF Audit Files Fileinfo](#)
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Questions?



TCM – The NonStop Experts

[www.tcm.co.uk](http://www.tcm.co.uk)