Supporting Linux
(I don't think we're in Kansas anymore Toto!)

Michael Szczepaniak

Hewlett Packard Co.

3404 E. Harmony Rd. MS 27

Fort Collins, CO 80525

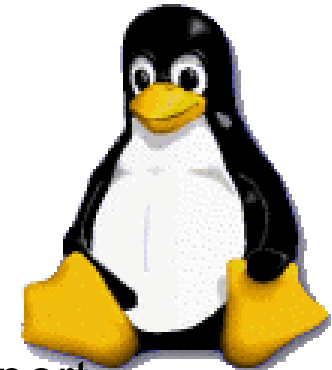(office) 970-898-7701, (fax) 970-898-7435

michael_szczepaniak@hp.com
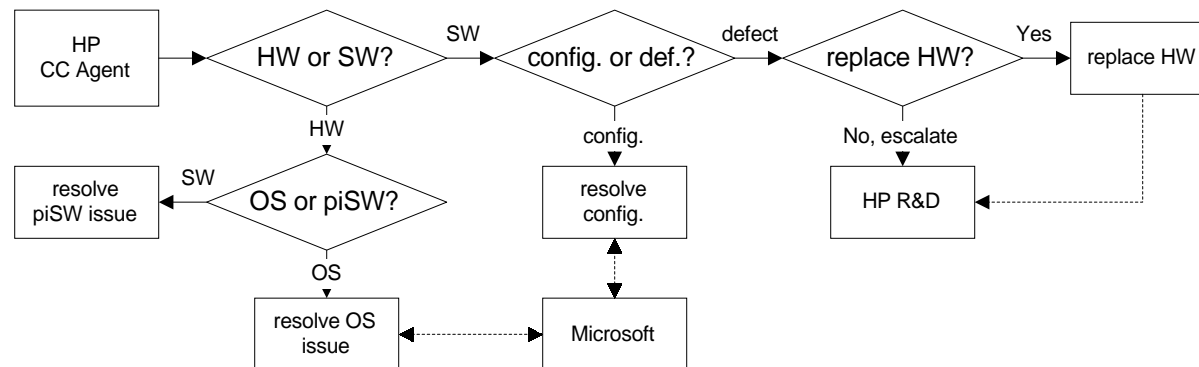
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Supporting Linux

Topics:

⊇ How support for Linux differs from NT and HPUX

⊄ How the Linux support model was created and implemented

⊂ What we've learned so far.

Supporting Linux ⊘Kansas

Supporting Visualize NT workstations:

Θ Different divisions with support organization support different OS's (concentration of expertise)

? 90-day support on pre-installed SW (industry std.)

? Microsoft last link in the support chain on SW side
("innocent until proven guilty" - style of support)

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┌──────────┐      ┌───────────┐  SW  ┌───────────────┐ defect ┌────────────┐ Yes  ┌────────────┐
│ HP       │ ───► │ HW or SW? │ ───► │ config. or def.?│ ────► │ replace HW? │ ───► │ replace HW │
│ CC Agent │      └───────────┘      └───────────────┘        └────────────┘       └────────────┘
└──────────┘           │                     │                      │
                      HW                   config.             No, escalate
                       ▼                     ▼                      ▼
┌──────────┐  SW  ┌───────────┐       ┌───────────┐          ┌────────────┐
│ resolve  │ ◄─── │ OS or piSW?│       │ resolve   │          │  HP R&D    │
│ piSW issue│      └───────────┘       │ config.   │          └────────────┘
└──────────┘           │               └───────────┘
                      OS                     ▲
                       ▼                     ▼
              ┌────────────┐          ┌───────────┐
              │ resolve OS │ ◄──────► │ Microsoft │
              │ issue      │          └───────────┘
              └────────────┘
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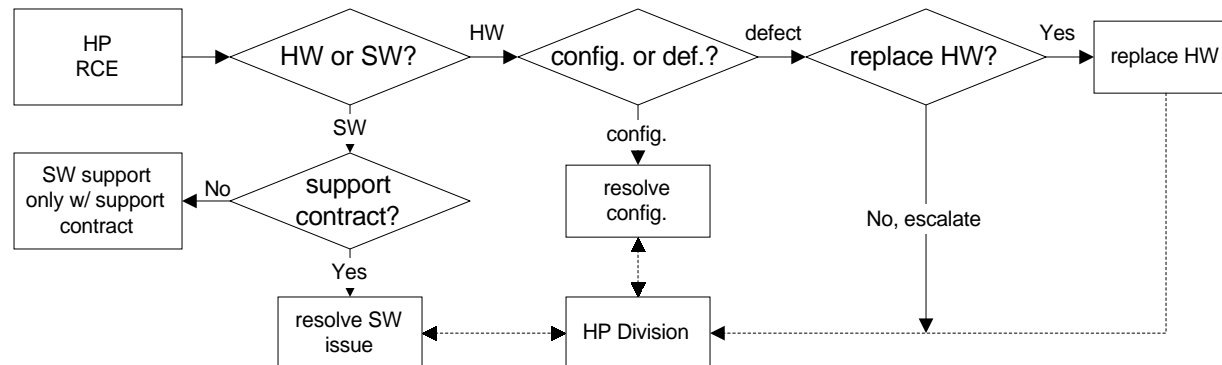
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Supporting Visualize HPUX workstations:

- Θ Some similarity in basic structure to NT support with some notable exceptions
  - ? No SW support without contract (vs. 90-day support on pre-installed SW on NT systems)
  - ? HP Division last link in the support chain on HW & SW side
  - ? Only qualified calls for HPUX support (non-qual. on NT)

HP RCE → HW or SW? — HW → config. or def.? — defect → replace HW? — Yes → replace HW

HW or SW? — SW → support contract? — No → SW support only w/ support contract

support contract? — Yes → resolve SW issue

config. or def.? — config. → resolve config.

replace HW? — No, escalate → HP Division

resolve SW issue ↔ HP Division

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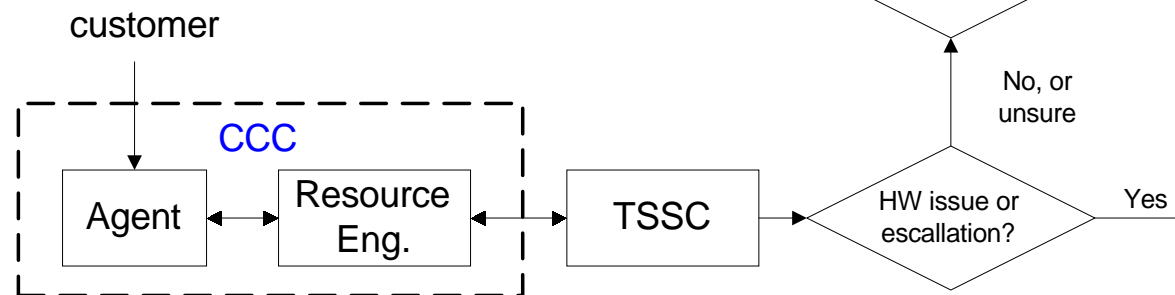
Linux Support Challenges:

- Θ Support split across **two** HP div's and potentially **two** 3rd parties *(Red Hat and Open Source Developer)* for same OS:
  - | NT support people takes warranty calls
  - | HPUX support people take non-warranty calls (support contract)
  - | Red Hat takes level 3 support

- Θ Hardware drivers:
  - | NT world: manufacturer written
  - | Linux world: usually Open Source developer written

- Θ Responsiveness and Accountability:
  - | Expectations with free/open SW products
  - | Expectations with proprietary SW products

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How we address warranty support :

| HP TCD primary backend (RH only for emergencies)
| Backend routing based on HW/SW determination (similar to NT and HPUX worlds)
| TCD established L3 support agreement w/ Red Hat for emergencies purposes.
| Agents & RC's trained internally by RHCE in US. Europe and AP self-trained.
| Differs significantly from non-warranty support

Red Hat

open cource comm.

TCD

No, or unsure

SW or OS issue?

Yes

No, or unsure

customer

CCC

Agent ◄─► Resource Eng. ◄─► TSSC

HW issue or escallation? Yes

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Warranty vs. Non-Warranty for Linux WS's:

- Θ Warranty
  - | HW - similar to NT workstations (3yr.) but only for HW that was shipped with the system.
    - ™ Driver issues: (NT world / written by HW mfg'er vs. (Linux world / written by Open S'ce dev.)
  - | SW - similar to NT workstations.
    - ™ Consultation not covered under warranty ("How do I set my Apache server to do …?)

- Θ Non-Warranty / "Extra-Warranty"
  - | Support for all Red Hat Tier 1 HW (see www.redhat.com)
  - | Requires purchase of support contract
    - ™ Much larger scope of support (networking etc.)
    - ™ options vary based on type and speed of response to support requests

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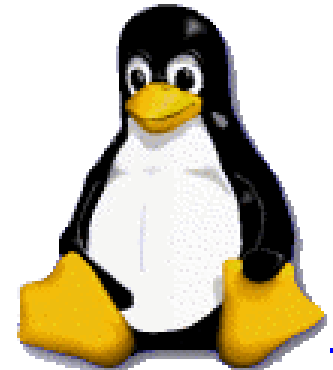
What we've learned:

- Θ Learning how to use www better:
  - | Importance of a good www support site (white papers etc.)

- Θ Open Source community is surprising responsive (so far):
  - | Pcnet32 story

- Θ Innovative ways of delivering support are emerging
  - | www.QuestionExchange.com
  - | HP electronic support center (Dell has similar strategy)

- Θ Other stuff
  - | quiet on call front - using quite time to "tighten ship" (e.g. call logging issues)
  - | Red Hat OS upgrade policy