Using ProductView as an Essential Business Process Enabler
- A 10 Year Success Story

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Brief History – years 2000 >> 2010

- 2000 – Intralink 3.1

- 2001 – First use of Division ProductView

- 2002 – Assembly Instructions (Drawing views) via Pro/Process

- 2003

- 2004 – Gradually increased usage of many tools/functions

- 2005

- 2006

- 2007 – Windchill PDMLink 8.0, Integral ProductView

- 2008

- 2009 - Windchill PDMLink 9.0

- 2010 - Windchill PDMLink 9.1

Brief History – year 2000

- Killing Trees

Brief History – year 2000, cont.

- Implemented Intralink 3.1
  - ALL product data: Pro/Engineer & other CAD, etc.

- Had brief demo of ProductView by PTC
  - Seemed kind of interesting
  - Not at all clear what it was, what it did
  - More investigation, demos, study
  - Yes, this can probably help us a lot
  - Purchased server license and 4 PV Standard Client licenses

Brief History - 2003

Brief History – 2003, cont.

- Uh oh - major problem…
  - Official copy from ProductView doesn't match Official copy in File cabinet with red stamp
    - Investigation
    - F   Control,
      t

- Major
  - No
  - View   aster
    - F   rol,
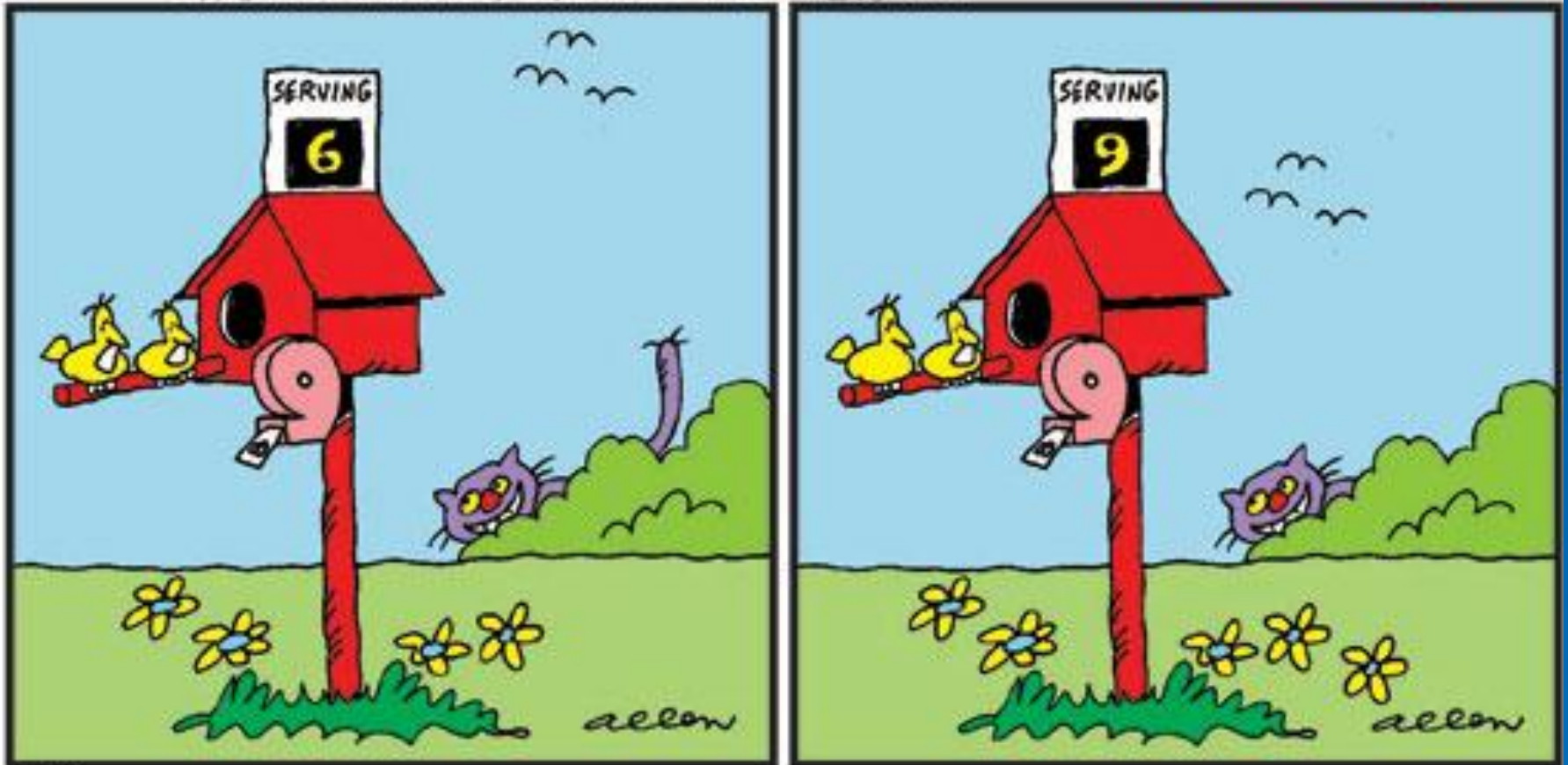   E

Brief History – 2004

- Things get smoother / more efficient

  - Designers required to ensure that viewables publish correctly

  - Checkers required to access via ProductView

  - Checkers start to use Annotations, not red-mark paper

  - Users also start to discover 3D viewables

Brief History – 2004, cont.

Brief History – 2005

- Usage extended …
  - Tech writers taught to obtain images from ProductView as needed
    - No more requesting from Pro/Engineer users
  - Increased use of annotations during design reviews; virtually no paper now
  - Doc control down to 4 people, 1/3 of the original file cabinets
  - Watermarked prints for all quotes; all tied to specific iterations w/no additional effort

Brief History – 2007

- Windchill implemented

  - Migrated from Intralink 3.4

  - Invested in Doc Collaboration Option
    - Can now publish Word documents just like Pro/Engineer Drawings

  - Scanned all remaining paper drawings and documents (80,000) and added to Windchill

Brief History – 2007, cont.

- Doc control "push" function eliminated by end of the year

  – No more photocopies

  – Down to 1 file cabinet

  – Down to 1 person

Brief History – 2008

- Manufacturing installs computers at every work station

  - No more paper assembly drawings; access and use via ProductView

  - Pre-requisite: Assembly instructions using Pro/Process module of Pro/Engineer
    - Formatted to fit standard monitor

  - Distributed "Control files" eliminated by end of the year (no more paper)

Brief History – 2009 /2010

- ProductView client installed on ~ 900 computers, 18 facilities

- No more a concept of "document control" (no longer needed)

- Continued refinement of usage, processes with upgrade to Windchill 9.0, then 9.1

What Allowed All This to Happen?

1. The master is in Windchill PDMLink, not in some other document control system
   - Eliminate red-stamped paper "originals"
   - The master is the electronic published viewable, available via ProductView
   - All drawings and documents treated alike (Pro/E drawings, Word doc's, etc.)

2. All users given needed access to Windchill

What Allowed All This to Happen?

3. Watermarks essential:

- Correct watermark required on every product document used for business purposes

- Watermark differs by Drawing / Document state (e.g. In Work, Released, Obsolete)

- Watermark includes essential database info: Number, Version, User, Date accessed

Note: No way currently to apply watermarks to data managed by ECAD Work Group Manager

What Allowed All This to Happen?

4. Correct Watermark (Released state) also required on all drawings / documents "red-lined" for changes. Example:

  - Specific change need for a Revision B drawing

  - Rev B drawing obtained from ProductView with watermark, then "redlined" (electronically or in ink)

  - Watermark confirms that the "real" Released Rev B is the starting point for the proposed, then approved, then implemented change

What Allowed All This to Happen?

5. Additional productivity tools in ProductView

- Drawing Overlay

- Annotations

- Etc.

Summary

- Electronic Masters in Windchill (verified published viewables)

- Require that documents on which you do business are viewables with correct watermarks

- Implementation takes some real effort – setup and ongoing

- Take advantage of other ProductView tools once viewables are available

Pictures / Demonstrations

It takes effort & nurturing over time, but worth it

Please feel free to contact me

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