



Making the pieces fit

Maria Bryan
Lamri Managing Consultant
&
Mark Calder
IBM Rational Senior Consultant

Welcome



- Tools support your business processes, to purchase a tool with no defined process to build it around is akin to trying to put together a jigsaw, without the picture on the box!
- Our presentation today is centred on “making the pieces fit”; aligning process and tools.



The Converts



- Before, it was common for hear Maria say “that’s too tool specific, I want to talk about the process !” Recently Maria was witnessed saying “Don’t underestimate the power of ClearCase“!
- Before, Mark thought that his CM Implementation Plan was the Process. Now Mark asks “why do you want the ClearCase to do that ?“, Instead of saying “of course it can !“
- We are here because we have seen the success a collaboration of tool and process (with process first !) can really make the difference.



Common Standard Requirements



- Sarbanes Oxley, CMMi, ISO20K, and their supporting frameworks such as COSO, COBIT, and ITiL have common requirements:
- Ultimately, they are all looking for consistent working practices that exercise control and minimise risk.
- A process need not be changed to satisfy all standards, it is the evidence required at appraisal / audit time that differs, and that's where IBM Rational tools really come into their own.
- Prevalent amongst the common processes are Configuration Management and Change Management.



Common “Standards“ Requirements (ii)



- If we take a broad brush to the evidence requirements for Configuration and Change Management.....
- Both ISO and CMMI look for evidence that there is an owned policy and process, which identifies configurable items and ensures that changes are assessed, authorised, enacted, verified and recorded: with all activities being carried out by people with the appropriate authority, whose roles and responsibilities are clearly documented and communicated.
- Sarbanes Oxley looks for all of the above, plus traceability for charges that can be levied for the change.



Case Study - Background



Our fictitious company is called Widget international (Maria isn't very technical – but she likes widgets!).

They design widgets for the aerospace industry, and are looking to break into the defense sector (not literally !).

They may go for ISO20000 next year, but their immediate goal is to take a journey through Maturity Level 2 through Maturity Level 3 of CMMi (for Development).

When they underwent a baseline appraisal, a set of gaps were identified that were common to a lot of organisations starting out on becoming process focused: let's just look at the ones relating to configuration and change (we only have an hour !)



Case Study – Gaps / weaknesses



- No policies have been defined to provide direction on the use of process: exacerbated by a lack of formal processes or roles and responsibilities within a given process.
- Process training does not take place
- There is little evidence that configuration items are identified.
- There is some evidence that projects are starting to establish CM principles (spreadsheet of assets and version control), but this was not evident across all areas.
- There is no formal CMDB - Configuration Management is generally restricted to the use of a shared drive
- There is no evidence of the auditing of the shared drive
- The concept of establishing coherent baselines is not well understood
- Where changes are implemented, they appear to be managed well; however, no formal change management process exists.





Case Study - Let's buy a tool!

The good news – Widget decided they needed expert help to address the process weaknesses.

The bad news – they bought a tool and deployed it “off the shelf“

This solution gave them :

- A Configuration Management Database
- The ability to baseline
- Some defined states that can move a configurable item through requested to implemented
- The ability to raise and record change requests
- The ability to conduct version control and report changes to configurable items
- A “Configuration and Change Process“

They underwent a follow up assessment – anticipating closure of the gaps.....

Case Study – Why do we still have gaps/weaknesses? (the so what test)



Unfortunately, Widget International weren't in much better shape.

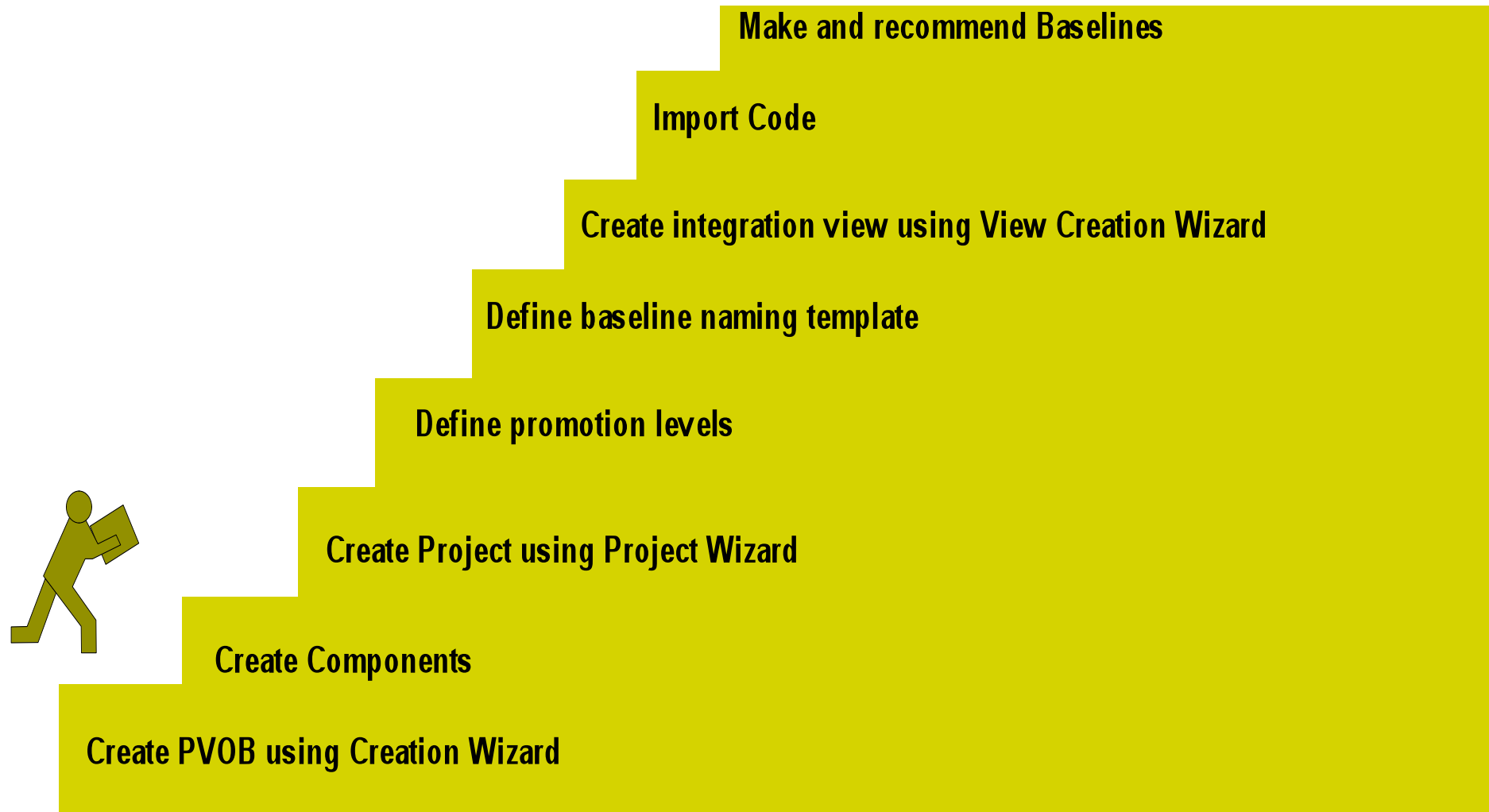
Their MD, Barney Rubble (Mark's not good with names, but he remembers the Flintstones!), goes through the gaps again with the assessor to point out their "Improvements".

- We have a CMDB
- We have the ability to baseline
- We have the ability to record changes
- We have defined states that track changes through submitted to closed
- We have the ability to report on changes to configurable items
- We have a Configuration and Change Process !



Case Study-Your Processes aren't processes !

What you actually have is a set of logical steps for setting up the tool using ClearCase

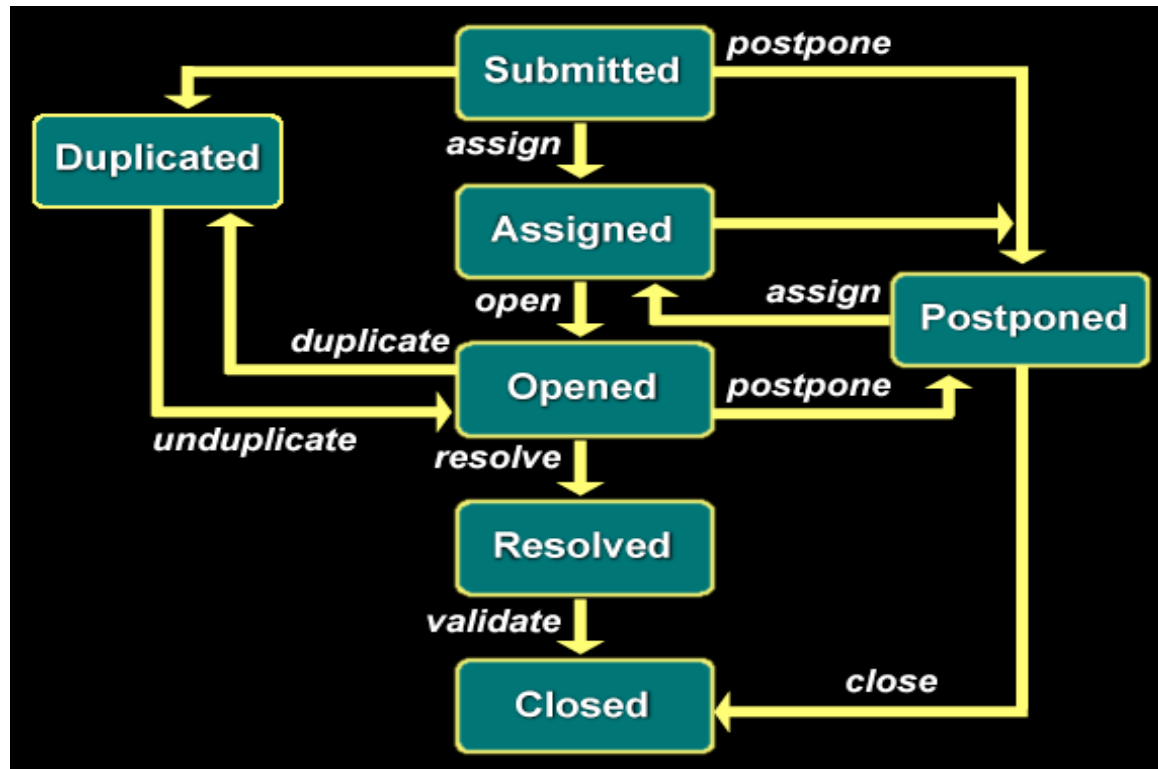


Case Study - Your Processes aren't processes ! (j)

(The difference between a process and a process map)



- Similarly, what you have is the “change” lifecycle through the tool.



Case Study - We were sold the wrong tool !



.....Is the automatic response.

- In reality, the problem lay with lack of process on which to set up the rational tool set. To get the best from the tool set (and to meet requirements of the standards), a picture to work from would provide:
- A policy – that sets the direction for the processes, or set of processes (you don't need a one to one mapping of policy to process).
- A Process, which should define :

Scope, Purpose, Roles and Responsibilities, Resources, Process Map, Detailed process steps, Performance metrics, Review and Approval Details, References, and a Glossary



Case Study: Let's buy some processes !



- The realisation has hit that some processes are needed. Looking for a quick fix, Mr Rubble tries solution II – another “off the shelf” solution.
- Q) Where can I buy my processes ?
- A) You don't, your processes are subjective to your business



Case Study: Lets buy some processes !



- Other people's best practice only works if you are practicing the same business to the same level, and even then, your customers, your culture, your business practices will be different.
- Processes such as Configuration and Change Management have common steps at the highest level, but at the working level, you need your process to be business specific : unless it is, the tools you utilise can't be used to best effect.
- This journey started with Widget looking to address common weaknesses, but in context to their organisation.....

•Let's start again!



Case Study: Process 1st – Break it down



Lets backtrack and consider what had happened had Widget International invested in some process help from Lamri first.....

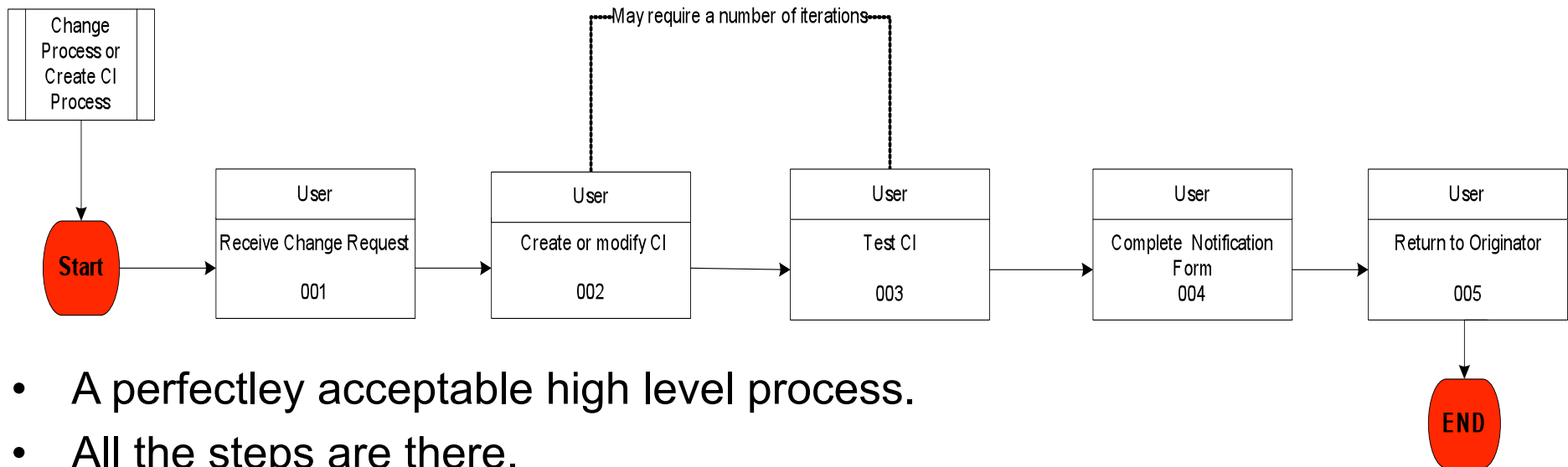
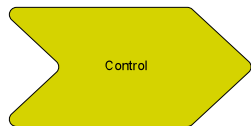
The Process Suite:

- Configuration Management Policy*
- Master Configuration Management Plan*
- Configuration Management Process
- Change Management Process
- Configuration Management Plan Template (for projects)
- Configuration Waiver Process
- ClearCase User Guide
- ClearQuest User Guide

Case Study : Process 1st – Initial Picture



Consider what you need your process to do and what controls may be needed – put tools to the back of your mind for now



- A perfectly acceptable high level process.
- All the steps are there.
- Putting the detailed activity around these and support in the shape of two forms, (a request form and a notification form), won't be too onerous.

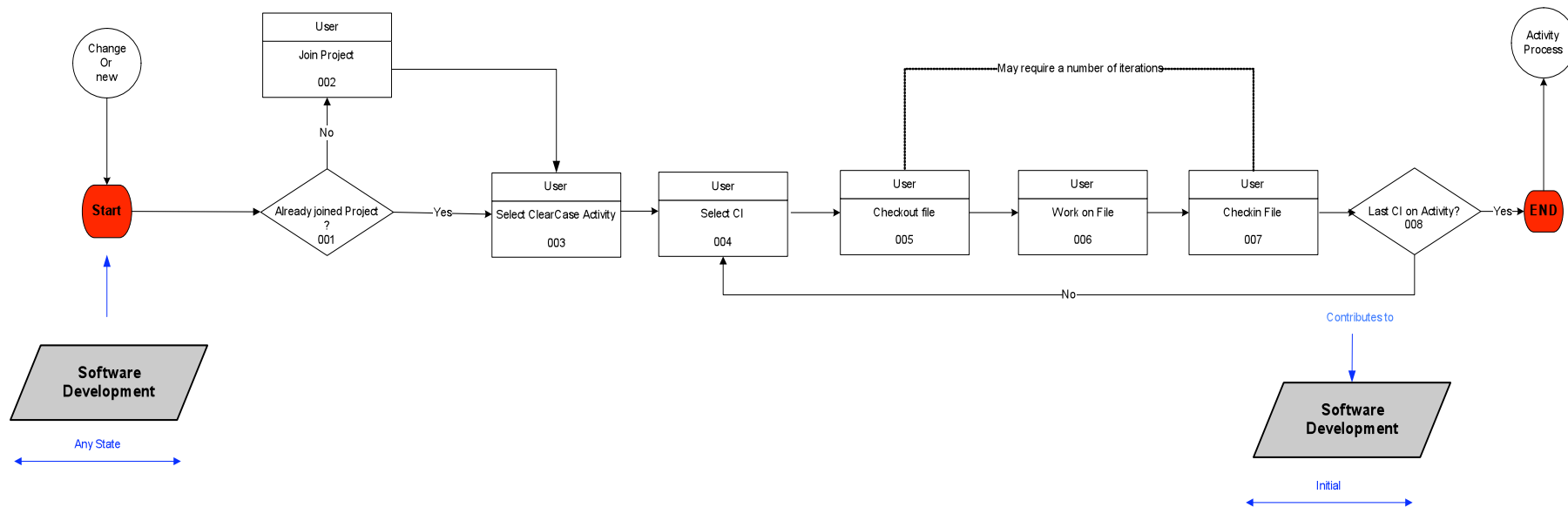
Case Study : Picture after tool is configured



Now consider how best to configure the tool to make your process and controls more efficient



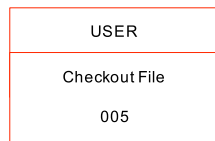
CI MODIFICATION - ClearCase



Case Study : Process 1st – the devil in the detail



Step 005 in flow



Process Extract – detailed activities

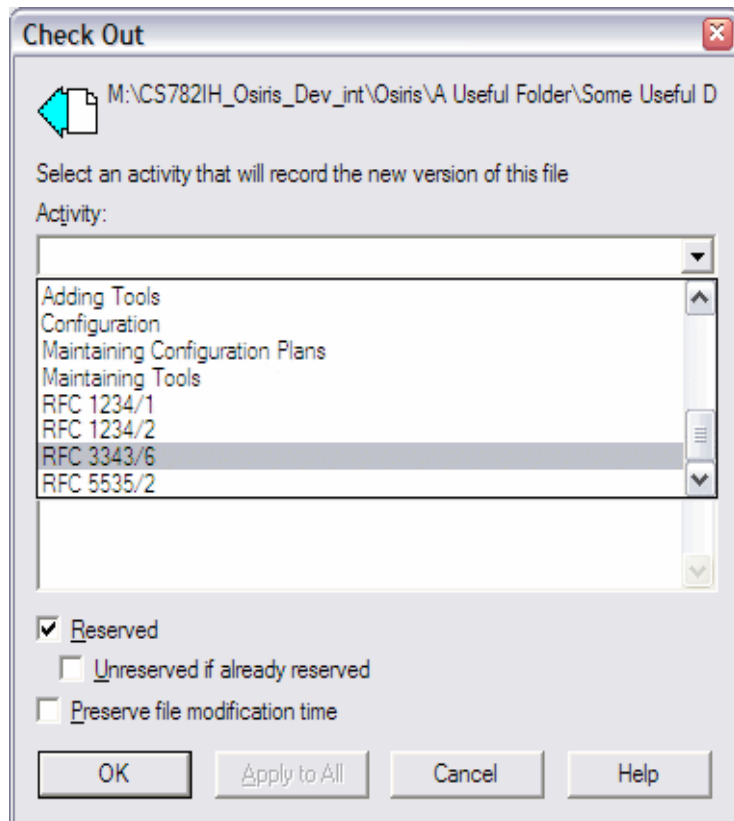
Step	Activity name & description	Deliverable	Responsible for Activity (Doer)	Output to	Guidance Notes
004	Select ClearCase Activity: Select the activity that has been created from the Change Request that will allow the modification of the CI.	ClearCase Activity	Developer	Step 005	Rules: The activity should be linked to the Change Request.
005	Checkout CI: To make CI Read/Writable and reserve the next version in CMDB.	Checked out file	Developer	Step 006	General: A number of iterations may be required for steps 005, 006 and 007 before you have finished the change. Reference: See ClearCase User guide (GUIDE01) for details on how to checkout a CI

Case Study : Process 1st – the devil in the detail



User Guide Extract – Checkout CI

To check out an element (file), right-click on it and select "Check Out..." from the menu, or use the Check Out toolbar button (📁). When this is done, the Check Out dialog is displayed:

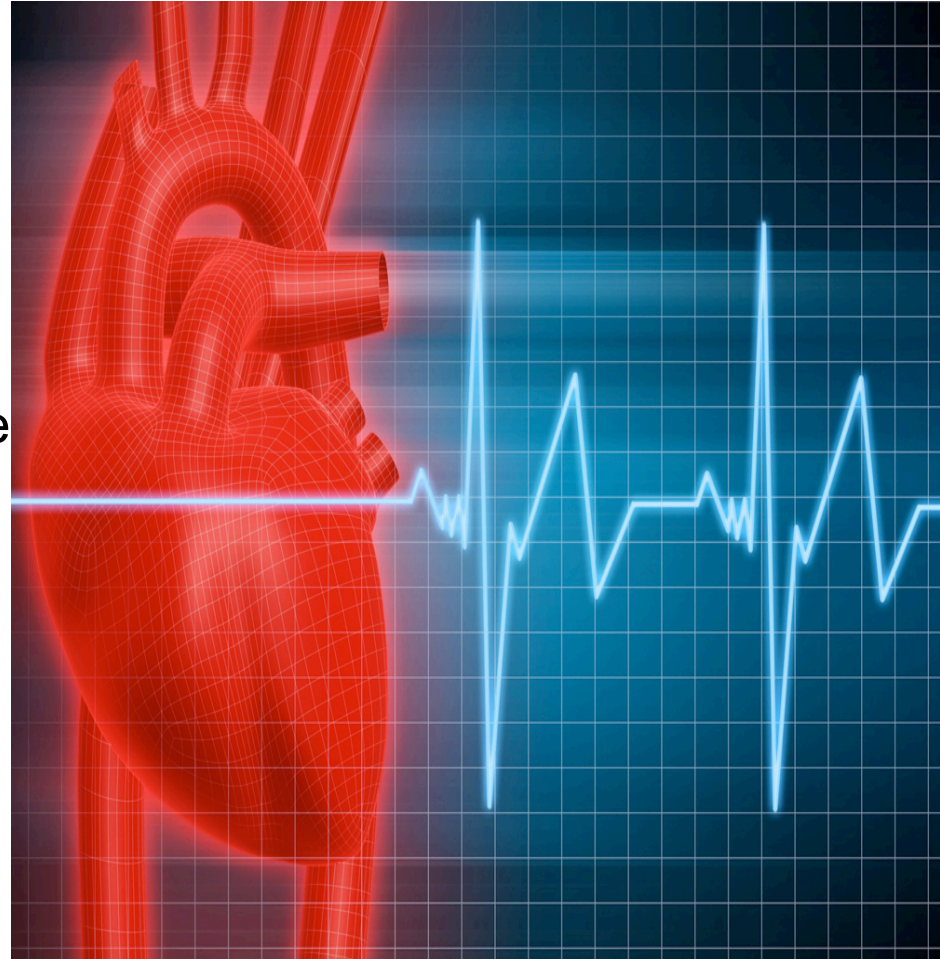


Select the activity appropriate to the change being made and click on OK. Within ClearCase explorer, a tick icon will appear to indicate that the element is checked out:

Case Study : Process 1st – Health Warning



- Processes become shelf ware when they don't reflect the “real world”.
- Part of the reason for this can be when Barney is tasked with writing the process, and does so, on his own, from his own viewpoint : processes constructed with the input from all the stakeholders, and put through a release cycle, fare better and hold the gains longer.



Take-Away Menu 1 - Processes



- Don't just use a best practice from someone else – tailor to your operation
- Process 1st identifies the user access and authority requirements.
- Process 1st means that process and tool can be released at the same time: bringing context and assurance of operational alignment
- Don't fit your process around your toolset – the key elements of standards, automated controls and access requirements will be missed.
- Both tools and process need to be “released” and “rolled out”
- Processes change as your business evolves – review them
- Doing it in the right order can often save doing it again...and again
.....and again !



Take-Away Menu 2 - Tools



- Use the processes to set the direction for the tool functionality: meaning less workarounds
- Tools can then be configured to provide “evidence“ of process operation: less manual intervention when audits / assessments become due, configuration of automatic “preventive controls“.
- Tools will only be as successful as process they are supporting.
- Incorporate the processes for your tools training – it then becomes “real “ to your users
- Tools need to adapt to your changing processes – make sure you keep the two aligned

Thanks



Questions?

