 “The secret of change is to focus all of your energy not on fighting the old, but on building the new” -Socrates

My name is River Taig, and I am the lead front-end developer on ENTRUST Moc Manager. EnTrust Moc Manager is of course a web application for Management of Change—it is designed for your company to be able to effectively, efficiently, and safely create a change in such a way that all of the important people affected by the change are notified as the change evolves from an idea to something being considered, to something that is now standard operating procedure. It software that provides an opportunity for stakeholders to express concerns about a change and has tooling to allow administrators and managers to make informed decisions.

When I was first told about the possibility that I would be involved in developing this web app, I was informed that the primary driver was a new law set to go into effect early this year that would require compliance. That frankly didn’t sound very exciting. In my 20+ years as a developer I’ve had experience writing software that companies willingly purchased (and then didn’t use) to “be in compliance”. But as I learned more about what Management of Change really was, I quickly realized that there really was a real need for a quality web application that could effectively and efficiently manage change – regardless of any impending legislation.

I really like that quote from Socrates (or as Bill and Ted would say “so-crates” dude). What I appreciate about it is that it recognizes that quality change stems not from a new procedure or protocol that is forced upon the unwilling, but rather about ***building*** consensus and understanding around something new that makes things better. Change is not just a thing to push against, but rather a story that needs to be built.

As I was working to design this web app with the team, I think we were all thought about how this software could help “tell the story” of change. For me, having a rather analytical mind I wanted to break the story down into is basic building blocks – WHO, WHAT, WHEN, WHY, WHERE, and HOW.

Of course, I will get to the demonstration of the beta-version of the web application here very soon, but I want to first put up six slides for those six words with a few questions on each slide—in my mind any successful Management of Change software needs to be able to speak to those questions. It’s not a comprehensive list by any means, but what I want to do is “prime the pump” so to speak so that during the demo you can look for the answers to those questions *and others* and from that determine if ENTRUST MoC is something that can help your company build quality change.

WHAT? – (1) What is the change? (2) What is driving this change? (3) What are the impacts of the change? (4) What do I need to know to do because of the change?

WHO? – (1) Who will be impacted by the change? (2) Who is requiring this change? (3) Who approved this change?

WHEN? – (1) When will this change go into effect? (2) When will the change no longer be required? (3) When and for how long was this change being considered?

WHERE? (1) Where is this change taking place? (2) Has this change been tested elsewhere? (3) Can I see a map showing data related to the change?

WHY? – (1) Why is this change important (2) Why is this change permanent (or temporary)? (3) Why was this change delayed?

HOW? – (1) How can I know if everyone who needs to know about the change was actually notified? (2) How can I know if those people understood the change? (3) How can I learn from the challenges we experienced with this change?

OK – Demo time. First, the let-down. I am not going to do a live demo. There’s two reasons: first, this is beta software and quite frankly its not quite ready for prime-time yet. It’s close, but it isn’t ready quite yet. Second, there would be a lot of watching me type and waiting for emails to arrive—that doesn’t make for a compelling drama. So we will watch an edited movie first and then take time for Q and A. At the end if there is still time and folks are interested in having me demonstrate some aspects of the software live, I would be happy to do that.

1. This demonstration is going to start with a very important person at the ACME corporation, Alice Admin. Alice Admin is an administrator and in her role can do things such as create new users, new groups, and assign users to the groups. The administrator can also assign users roles such as Approvers, Creators, or Stakeholders – they can even create other administrators.
2. Let’s get logged in as Alice. We see options for “My Change Notifications” and “Administration”. At this point, if we click on “My Change Notices”, there aren’t any at this point—that is because no Change Notifications (or what you will be referred to as CN’s) have been created yet. What we will now do is go to the administration page and create two users:
3. On the user’s tab, we can see some users that have already been created – I will introduce you to them in just a second, but first I want to create a new user, Carol Creator. Carol was just hired as a “Change Creator” which means that she can create change notifications. You will see in a bit how when Carol creates a CN she can ask an approver to review the change.
4. Let’s meet some of the other ACME employees who have MoC Manager accounts:   
   **Alan Admin** – Alan is another administrator for the ACME corporation just like Alice is and he can do anything that we can do. Also, here’s **Aaron Approver** – as an approver, he can approve or reject CN’s that somebody like Carol Creator might create. Finally, let me also introduce you to Sam and Sally Stakeholder –Sam works only in ACME’s South region while Sally works in the North region and the South region. Sam and Sally Stakeholder need to be notified of important changes based on the groups that they will be assigned to – you will note that they both have the Stakeholder role.
5. On the groups tab we can see we already have a North Group. It’s simple enough to create a South Group as well. Of course, you can use whatever logic makes sense for your company for delineating groups – just remember that users get assigned to groups and that groups get assigned to change notifications. As a CN progresses through its life (from created to pending approval, to approved, to active, to completed, to archived) users in the groups are notified via email and/or text messages.
6. On the assignment tab, we can assign SamStakeholder to the South group and we can assign SallyStakeholder to both the south and the north groups. We aren’t doing so here, but it is also perfectly acceptable to assign approvers or creators to groups as well—such a scenario is well suited to smaller companies where one person needs to wear lots of hats!
7. All this time we have been logged in as AliceAdmin. However, in our work so far, we have also created a new user—Carol Creator. When that happened, she received an email. Here’s that email now…let’s open that up, change the password, and get logged on as Carol.
8. We are now logged in as Carol the CREATOR. Keep in mind that this is of course a web app. Carol simply follows the link on her computer or laptop to open up Moc Manager. Carol Creator of course has the ability to create Change Notifications. A creator creates change notifications on this tab. Just for purposes of speeding this demo along, I’m going to enter some magic text which will automatically fill out all of the required fields with sample data:   
     
   Discuss various fields and show the information buttons that give help

It’s important to understand that if you feel like you need a different set of fields to store information about your CN, we do plan to add that capability to the version 2 release of ENTRUST MoC Manager.

1. You will notice that at the bottom of the CN are two very important inputs. The Approver drop-down is currently unset, but we can set it to any approver that would have been given that role by our administrator. What you will observe is that while we can create a CN without any approver set, we can’t submit that CN for approval until we have chosen an approver from the list. Here I will set the approver to AaronApprover
2. The final groups checkboxes are the groups that will be stakeholder subscribers to this CN. In this first CN, lets assign it just to the south region (if you recall, Sam is the stakeholder for that region). Let go ahead and have Carol submit this CN for approval – you will note that when she does that she can attach notes to the CN…These notes aren’t part of the change notification itself, rather they are meant to be commentary on the CN to the next person who will pick up the CN downstream and are only seen on the email or text that person receives—you might for example explain your thought process in determining the date that the CN starts or bribe them with candy if they approve your change quickly.
3. Next Carol is going to create a second CN – again for the sake of time I will populate the fields automatically. Let’s also make Aaron be the Approver on this CN too, but this time, lets assign it to both the north and the south region. In this case both Sam and Sally Stakeholder will be involved.
4. Carol’s job is done. What exactly should happen when Carol submitted those CNs for approval? This is where we need to talk about the lifecycle of a CN.
5. Moc Manager comes with the Change Notification lifecycle that you see here out of the box – that is to say that without any configuration modifications whatsoever, you can “advance change” from CREATED to PENDING APPROVAL to APPROVED to ACTIVE to COMPLETED to ARCHIVED. If you need to reject a CN or reschedule a CN, there are paths for that as well. When a CN advances from one state to another state, a transition takes place—the arrows. For example, when Carol clicked the “submit for approval” button, then the “on\_pending\_approval” transition took place. When a transition occurs, one or more notifications takes place. For example, a transition might result in email heading out to approvers, administrators, or stakeholders. When a change is rescheduled, It might result in texting all of the people in the assigned groups. We have documented the default behavior for all of the transitions, but the important take-away in this demo is that you can use the default workflow as is or you can simplify or extend it to fit your companies needs. We can easily work with you to add or remove states or transitions and tweak the notifications so that everyone is getting the information they need without getting spammed.
6. As mentioned, the default behavior for on\_pending\_approval is to simply email the chosen approval officers (the thought being that there’s not a need to notify stakeholders until a change has been formally approved). Switching back to email, I can see that Aaron Approver has indeed received an email stating that a new CN was created and is awaiting approval. And Just a quick note on the demo so that you aren’t confused…my work email is [rivertaig@entrustsol.com](mailto:rivertaig@entrustsol.com), which is what we are looking at now. I had our email administrator set up forwarding of various email address (like [carol\_creator@entrustsol.com](mailto:carol_creator@entrustsol.com)) to my email address so that I wouldn’t have to switch email accounts during the demo). Hopefully that’s a minimal amount of smoke and mirrors—rest assured, those are valid email addresses, it’s just that they have been re-routed to me. The unfortunate downside is that my boss calls now calls me Alice. Anyway, back to the demo.
7. When we log in as Aaron Approver, we can now head over to “My Change Notifications”. Because we chose to log in as an approver, we are looking at just the CNs where we are assigned as the approver. Now at this point in a real world change, you would doubtless study the change with some amount of rigor and carefully consider whether it was a good idea. You might contact subject matter experts or hold meetings to solicit feedback. It’s possible the CN would stay in the PENDING APPROVAL state for some time.
8. Switching back to the default workflow, at some point the approver is going to have to make a decision—will we approve, reject, or require updates. I might add that currently an approver can actually make edits themselves, however, it is possible to establish a workflow such that an approver can only approve and not make edits. While that process might seem at first thought overly complex, for some companies, requiring a formal update and resubmission process might be the required amount of rigor.
9. For now though, lets go ahead and approve the first CN. Again we can attach notes to the CN. If you recall, only Sam Stakeholder of the “South” group should be notified when this occurs.
10. Switching back over to email, we can see that Sam has indeed been notified. Just to add a little spice to the sauce, I can let you know that the ability for companies to be able to configure the html text of the emails and SMS text messages that are sent out is on the backlog for version 2 of MoC Manager.
11. Let’s go back to Moc Manager and also approve that second Change Notification—as you may recall, this one went out to Sam and Sally Stakeholder. Again, we will include some sample notes to attach to the email.
12. We can verify that both Sally and Sam Stakeholders were sent the emails…I think maybe now you can appreciate why I am having all of the emails forwarded to me. Without that this demo would largely be about me fiddling with Outlook.
13. Let’s log-out of MoC Manager as the approver and log-in as [SamStakeholder@entrustsol.com](mailto:SamStakeholder@entrustsol.com). When we do that, we see just one CN in our queue which is correct because sam only belong to the South group. When I click on it, I have the ability to read all of the details of the Change and *most importantly* I have the **obligation** to acknowledge that I have read and understood the change. But, at this point as a stakeholder, I can also raise an objection to the change—perhaps a reasonable concern for safety would arise if this hange were to go into effect. The default behavior of raising an objection is to inform the original creator (Carol) as well as the approval officer (Aaron in this case). An objection doesn’t change the state of the CN, but it might give an approver pause for thought at which time they might decide, to place the CN in a PAUSED state or to RE-SCHEDULE the change. It’s all about effective communication.
14. Let’s log out and log back in as Aaron Approver. A primary responsibility of an approval officer is to advance the state of a CN beyond approved and into an active state. But when is it safe to do that? Well presumably you will want to know that everyone (or at least most people) who were designated stakeholders for the CN have acknowledged their understanding of the change. Aaron Approver can see that the CN assigned only to the south group has a 50% acknowledgment rate. If you recall, both Sam and Sally stakeholder were supposed to acknowledge that CN, but so far only Sam has. At Aaron’s disposal is a tool to send follow-up emails. Now of course the first email went out just a few minutes ago, so hopefully you would give Sally just a bit more time to react, but let’s see what happens when we click the “send followup email button”. Moc Manager tells us who hasn’t yet acknowledged the CN and provides phone numbers for us. It asks us if we would like to send followup emails or texts. Lets do that just to pester Sally.
15. Back to the email and we can see a more urgent email now that Sally stakeholder had darn well better respond to. She clicks the link, logs on, and acknowledges the two Change notifications. Just as an aside at this point as the demo draws to a close, something that I think is a rather novel idea that we are soliciting feedback on is taking an extra step to really ensure that stakeholders have truly understood understood a change. For example, you might have an important new safety procedure that you need to be sure people completely understand (and not just blindly acknowledge). We were thinking that for some CNs you could pose one or more multiple choice questions and the logged in user would have to score 100% before they could acknowledge the CN. If the user got one wrong, the question would reset and the user would have to answer again.
16. The final step that I won’t to show you is that I can log back in as Aaron Admin and now I can see that I have 100% acknowledgment on both of the Change Notifications. It is likely at this point that Aaron would manually move the CN to the ACTIVE state on the date that the change was set to take effect. Something that we are considering for a future release is the ability to schedule the CN to go-live provided that everyone has acknowledged the CN and that no objections have been raised.
17. Ultimately though every CN, even those that get cancelled somewhere in the workflow get moved into an archived state. An Archived CN provides all the information about the CN including the dates and times that it transitioned from one state to the next. In future releases there will be options to create reports based not just on CNs that are making their way through the workflow, but also on archived CNs—the idea here is that we can learn from our mistakes and successes how to create and manage change in more efficient and safer ways by really understanding what we have done before.
18. At this time, we can take questions and comments. Perhaps there are some things we didn’t talk about that you were really hoping to see? We are particularly seeking feedback right now on three topics:
    1. Is asking stakeholders to take a test to prove their understanding of a CN useful?
    2. Is the ability to schedule a CN and perhaps send out automated reminder emails something that would be useful?
    3. We are considering the idea of adding a geographic component to ENTRUST MoC Manager—can you think of ways you could make use of a map within MoC Manager?