My name is Richard Dancy, I'm an archivist at SFU in the Archives and Records Management Dept. We've been using AtoM for 2 years now. We use it for all archival description, for both paper and electronic records. For born-digital materials, we use AtoM in combination with Archivematica, so that it works as the access component of a larger digital preservation system.

And that's really the context in which we became interested in this whole rights management business. Because the workflow we imagined at the outset was that a university department or private donor would transfer electronic records to us, we'd run them through Archivematica, Archivematica would create the Archival Information Package (AIP) and send that off to storage, and then it would create a Dissemination Information Package (DIP) and send that to AtoM as the access copy. So within that workflow, virtually all the digital records we take in and retain winds up in AtoM. That means AtoM would include records containing confidential or personal information, and it would include copyright-protected works where we don't own copyright. So we needed a way to manage rights and implement restrictions within AtoM. Now in fact, and I'll come back to this, we've somewhat moved away from this workflow, but that was our initial idea and starting point.

There's two key policy approaches we wanted to be able to implement in AtoM. On the FOI side, with respect to personal and confidential information, records are either open, restricted, or pending review. When we arrange and describe university records, we don't typically make file-level access decisions. If a file is obviously open or obviously restricted, yes, we declare it open or closed. But if it's not obvious – and most times it is not – we simply assign an access status of "pending review". This means the files are listed in the finding aid, people can see they exist, and when someone requests access, this is when we do the actual review and make an access decision: open or closed. We do that for paper, we wanted to be able to do the same in AtoM with electronic records.

On the copyright side, we've adopted a risk-management approach. So – assuming there are no privacy restrictions – if it's public domain, access is open. If SFU owns copyright, we want to make the materials available through AtoM under a Creative Commons license. If a third party owns copyright, we want to distinguish between high-risk and low-risk material. If it's low risk we will make the material available
through AtoM without seeking the owner's permission. If it's high risk, online access is off unless we explicitly get the owner's permission. So we've got a whole procedure around this, with risk assessment criteria, and take-down procedure for dealing with complaints.

The point here is, we need some way to make these distinctions within AtoM so that AtoM will implement different access rules for different materials.

In 2013 when we started looking into this, you couldn't really do that. So we approached Artefactual and their idea was: let's take the Rights Area that had recently been added to AtoM and is modelled on the PREMIS standard – let makes it actionable in the sense that the data you enter there will be translated by AtoM into system rules that do something to a digital object – ie either turn access ON or turn access OFF. We sponsored some work on this in 2014 to cover the FOI use cases and that is reflected in the current release of AtoM. And then in this last year, there's been additional work that builds on that to handle the copyright use cases, so I'll show a bit of that because you probably haven't seen this yet.

How does it work? I won't go through all the detail, I'll just note that for any given digital object you can have multiple rights statements. The effect of some of those statements is to turn access ON and of others to turn access OFF. If there's a conflict between the ONs and the OFFs, the OFFs always win. There's quite few data elements that make up a rights statement, but they key ones from the standpoint of making it actionable I think are these: what is the basis of the restriction, what is the restriction, and what is the rule associated with the restriction.

So, what is the basis of the restriction: it could be a statute like the FOI Act, or copyright, or a donor-imposed condition. This is a customizable taxonomy in AtoM, you can have as many bases as you'd like. For each basis, there are three possibilities: allow, disallow, or conditional. And for each those restriction states, you associate ON / OFF rules, and you can have different rules for the thumbnail image, for the mid-size access representation and the full-size master copy.

Right now in AtoM, you can specify only one set of rules for allow, one set for disallow, and one set for conditional. One of the new things that's coming, is that each rights basis can have its own and different set of rules. So for example, conditional can mean one thing under Statute, and another under Copyright and so on.
The interface for setting these rules is now a matrix, with the checkbox representing the ON / OFF state. If one of your rules results in access OFF, the user see a text statement in place of the digital object and now you'll be able to customize the text so that each scenario that results in access OFF can have its own statement.

One of the critical features for us is the Copyright Notice screen. Of all the rights statement, copyright gets special treatment. If the rights basis = Copyright and Restriction = Conditional and the rule associated with conditional = Access ON, then in that one case when the user clicks on a digital object to view or download the full master copy they are first routed to a Copyright Notice page, where they have to click Agree to continue. And so this is how we handle those third-party protected but low risk works: yes, we will make a copy available for you to download, but you have to agree to use it only for a fair dealing purpose; anything else, it's your responsibility to obtain the owner's permission.

Assessment. Do we have everything we need now? On the FOI side, it works quite nicely because the three restriction possibilities (allow, disallow, conditional) map over nicely to the three access statuses we need: open, restricted, pending review, and we can set the rules accordingly. But copyright is less clear-cut, because we have at least four different scenarios but only three options to map them to. So, under copyright, allow = public domain, turn access on; disallow = third party protected, high risk, turn access off; and conditional = third party protected, low risk, turn access on via the Copyright Notice screen. But this still leaves the case where SFU is the copyright owner and we want to make it available under CC license. Really, this is another kind of conditional restriction, ideally the user would be routed to another and different Notice page and have to agree. But you can't do this, you can only have one conditional statement. So in fact we treat SFU owned material the same as public domain, and instead rely on the RAD note field to communicate the CC license terms.

And that I think is where we could see future development to build on this. Every right basis should have its own Conditional notice screen where you state what the condition is, and require the user to agree before download. So generalize the logic that right now only applies to Copyright.

One last word on workflow. Initially we thought everything ingest digitally winds up in AtoM. But we've walked back from this now for two reasons. (i) Most material will be pending review, meaning access is turned off, it seemed like a waste of computing resources; and (ii) we were a bit wary of the security implications, all it would take is one security breach and our credibility is shot. So the last piece of our
current development contract with Artefactual is a metadata-only DIP upload from Archivematica to AtoM. What gets sent to AtoM is not the object itself, just the metadata; when someone requests access, we go back to the AIP, do the access and copyright reviews and if it clear, then push it out to AtoM. So it's a kind DIP on demand system. In the short term, it will require a lot of manual intervention, but eventually we could build interfaces around that and automate the processes.

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Slide 1:
* Intro: we are using AtoM in conjunction with Archivematica for born-digital records: there will be restricted and copyright-protected materials in AtoM, need to be able to manage rights

Slide 2:
* Want to be able to implement SFU Archives' policy requirements for handling personal / confidential info (open vs closed vs pending review) and copyright (public domain vs low risk vs high risk vs SFU-owned material)

Slide 3:
* AtoM rights statements are actionable: result in AtoM turning access to digital object On / Off
* Key elements are the basis of the restriction (copyright, statute etc), the restriction (allow, disallow, conditional) and its associated rules (turn access On / Off for thumbnails, access reps and masters)
* New feature: each rights basis can have its own and different set of rules

Slide 4:
* If a rule results in access = Off, user will see a text statement instead of the object
* New feature: You can customize the statements for each rights basis

Slide 5:
* New feature: copyright notice screen
* If Basis = Copyright, Restriction = Conditional, and rule associated with Conditional is Access = On, then when user tries to download / view master copy they are first routed to a Copyright Notice screen, must click Agree

Slide 6:
* Assessment: can we now implement our policy requirements?
* FOI: yes, the three options (Allow, Disallow, Conditional) map to the three states (Open, Restricted, Pending review) and we can set the rules we need
* Copyright: not quite, there are at least four states (Public domain, third party low risk, third party high risk, SFU-owned) but only three options to map them to; how to handle CC licenses?

Slide 7:
* Possible improvement: generalize the logic that currently only applies when Basis = Copyright
* For every basis, if Restriction = Conditional and Conditional means Access = ON, then route user to a notice screen with customizable text to express the condition, user must click Agree

Working with Artefactual on a metadata-only DIP upload from Archivematica: only create DIP on demand when user requests access
* Idea is not to clog up AtoM with restricted or pending review objects