

# Cauldron

## Stone 1

Play by the same rules (Lucy)

## Stone 2

Share and Share Alike (Lucy) - also mutual aid

## Stone 3

Speak with One Voice (Lucy) see also 7

## Stone 4

Respect My Authority (Lucy)

## Stone 4.1

Defending the Faith

## Stone 5

Our goal is the Academic Interfederation. National federations, etc. are means to that end.  
(David Walker) See 19, 7, 6, 9

## Stone 6

We need to foster more open interfederation. Currently, there are barriers in the form of federation-specific metadata filters and the fact that each federation must support certifications like R&S for SPs. (David Walker, +1 Laura) - also see Stone 12, 7, 5, 13 (percolation of OIDC)

Commented [1]: Link to respecting authority, because some federations may be prepared to certify certain conditions others not --

## Stone 7

One working group charge was to provide a statement of purpose for the whole of research, scholarly, and educational federations. We recognize each federation may have internal goals and purposes that are driven by the needs of the communities the federations serve. Extending federated identity beyond the reach of local connections to global interoperation, however, is the promise that the many federations work towards, together. This goal does not have a common brand and or a single voice. We swim in the intention, like fish in water, but naming the obvious and pervasive intention was a challenge. We have settled on labeling this as Academic Interfederation, and the scenarios drove home that dystopian futures can be averted if all the R&E federations can speak with one voice about the value of Academic Interfederation and label it in a recognizable manner. (judith) See 3, 5, 6 (**brand needed**)

**Commented [2]:** I think we struggle with "one voice" for good reason in terms of governance, since there are different countries, legal structures, and priorities. But I think there's a big opportunity for "one voice" in terms of branding, marketing, and description of value and success.

**Commented [3]:** Thanks for providing that clarity!

## Stone 8

(Craig) Follow-up with specific action plans.

Actively recruit stakeholders to participate.

Key goals:

- Drive Suggested Actions into specific plans
- Rack and Stack Suggested Actions to identify specific actions that can be effectively supported with available resources (time, money & people)
- Find the "sweet spot" in the Suggested Actions that can be done with available resources and will have the most effect in promoting academic federations.
- Chase Money
  - Connect academic and societal benefits that are enabled by academic federations
  - Selling infrastructure is always hard, but this connection has to be made
- For each of the Suggested Actions, build a matrix of
  - Who are the stakeholders -- Chase Stakeholders
    - Make this as broad as possible
    - Academia, Industry, Government
  - How this Action can be connected to a stakeholder benefit
  - Identify specific subtasks to pursue this Action
  - How to support each subtask w/ resources (time, money & people)

## Stone 9

The perceived benefits that we provide have shifted. (providing a trusted network > provisioning specific, unique information (attributes) about individuals) We need to evolve to ensure that we remain relevant (Laura Paglione, +1 Dedra) - Also see Stone 21, 4, 31

## Stone 10

Expand the benefits of federation to those that don't have the **expertise** to take advantage of federations in house. (Richard Frovarp) - See Stone 26

## Stone 11

Leverage the experience gained building national federations to support the growth of industry-specific federations (make the technology we have shown to be successful in R&E relevant in other sectors). Federation as a Service (Dedra, +1 Laura)

## Stone 12

If **we don't do it, someone else will** (Laura Paglione) - also see Stone 6, 13, 15, 29, 30 (Multiply Divide, I will survive, Mission Accomplished) Compare to Stone 13

## Stone 13

R&E space used to be up there with the **latest tech** and advanced ideas....**where is OpenID Connect?** (Alan, +1 Laura) (Tinder for Research, and Mission Accomplished, Multiply Divide scenario) - Compare to Stone 12, 17, 28, 30

## Stone 14

**It's gotta be easier than this!** (Laura Paglione) - also see Stones 10, 11, 16, 21, 24 (I will Survive and Mission Accomplished scenario)

## Stone 15

On-campus **directories** going? As institutions move to outsource with Google/MS their directories are now in the cloud (Azure etc service integration) (Alan) - Also See Stone 12 and Stone 17 (I will Survive and Mission Accomplished scenario)

## Stone 16

People are not aware about Federated access. need to create more awareness programs about the Federated Access especially countries like India. (Raja) (+1 Dedra) See 7 (**brand needed**) See also Stone 20 (Scenario: I will survive, Multiply Divide)

**Commented [4]:** Includes determining whether an outsourced solution will be an appropriate solution. - from Righard's discussion

**Commented [5]:** I think this is a really important point. Of course, the services that serve the organizations within these federations will also need to make choices about who they connect with - their choices are going to include how many individuals they can reach when collaborating with a multi-federation, who those individuals are (are they the people who would be using the service), and the ease of implementation. The more fragmented this is, the more likely that we'll get silo'ed communities for the actual work being done.

**Commented [6]:** A statement of URGENCY

**Commented [7]:** REFEDS & Academic Interfederation

**Commented [8]:** Maybe we should figure out how to enable this. (See Stone 6)

**Commented [9]:** bring other groups in

**Commented [10]:** People needing more contemporary protocols

**Commented [11]:** thought leadership lost? Or tension between stable infrastructure and academic use cases that are not supported by cloud providers and the "one Voice" branding.

**Commented [12]:** Academic Interfederation One Voice: Some federations have support. Some waiting on the OI DC federation spec.

**Commented [13]:** Two: policies and terms across countries; technological complexity for flexibility (shib adapting to nonstandard behavior) ; commercial nonstandard implementations that don't support ; IDP differences in attributes released for different purposes.

**Commented [14]:** We can also make a distinction between fed infrastructure and presentation -- how a fed env is presented to and used by users. Imho, there is a large potential of innovation is how fed envs are used.

**Commented [15]:** Unnecessary variability in attribute statements produced by different IdPs. Eg, various Subject identifiers.

Avoidable variability in policies and processes used by different national R&E feds.

**Commented [16]:** "Institutions have their heads in the cloud" - academic interfederation needs to take this into account

**Commented [17]:** the primary source of the institution's identity data; as this happens different barriers to integration may be introduced while new capabilities... [1]

**Commented [18]:** Ie, "cloud-first" is on the increase. Acad Interfed must go there too.

**Commented [19]:** This might also mean Acad Interfed needs to take into account the fact that different countries are in different stages of development of... [2]

## Stone 17

Managed services are not the enemy. Need to provide the kind of services people are looking for (Dedra, +1 Laura, +1 Judith) (Scenario: I Will Survive). Also see Stone 15. Balance this view with Stones 12 and 13, ie, if we don't do it, maybe we should embrace what they do sometimes.

## Stone 18

Are R&E federations only of use to R&E institutions? Why no adoption for access/single sign-on etc at other levels of education (or colleges/universities with no/low academic research functions)? (Alan, +100 Laura ) (**brand needed**) (Scenario: I will survive, Multiply Divide) Also see Stone 16.

## Stone 19

Are national federations the real barrier to world-wide federated access? (Alan) See stone 5

## Stone 20

We need to be better at telling success stories for federation, see stone 7 (Dedra) (**brand needed**)

## Stone 21

We keep on getting hooked up on what's wrong with now (and taking that as a 'it won't change') rather than where we want to be and the future we aim for (Alan, +100 Laura) - Also see Stone 9, 5

## Stone 22

The key to success is adoption. Be patient, facilitate adoption through collaboration (bottom up over top down) (Dedra, +1 Laura)

## Stone 23

Future proofing/sustainability? The current Federation people are getting older....where's the next generation? Who will support what is being done into the future? (Alan) Connect with Stone 21.

## Stone 24

Need balance between making clear decisions on direction and applying resources to execute, and maintaining open-mindedness to changing priorities, marketplaces, technology, and expectations. Don't be rigid about how things have been done in the past, but don't be in

**Commented [20]:** Acad Interfed should address those with fewer resources, or who may have decided long ago that federation wasn't relevant for them. Eg, community colleges/further ed.

**Commented [21]:** OPPORTUNITY  
Academic inter-federation occurs frequently with strong research program academic institutions.

Bilateral integration occurs more frequently for academic but NOT research institutions. Bilateral integration has communities missing out.

**Commented [22]:** Lucy: where are their interests (Acad Interfed and national fed) aligned and where do they differ? Is their commonality sufficient? And is it a matter of different choices, or more often inadequate resources constraining what's possible? Should there be a federation for "the homeless"?

**Commented [23]:** No, but requiring implementations/deployments in each federation slows progress.

**Commented [24]:** +1

**Commented [25]:** Maybe also, it needs to be easier to have success stories for federation.

**Commented [26]:** The reason for this WG. Need some "juice" to motivate looking forward. Be ambitious. Eg, OIIC, verifiable credentials.

**Commented [27]:** Lucy: really important. Deployment/adoption is what matters, not the standard per se. Marketing by Voice of Acad Interfed.

**Commented [28]:** and simplification of the most common path!

**Commented [29]:** OIX WG working with bankers and financial technology.

**Commented [30]:** Implication for Voice of AI: lead through change, articulate what works. Identify the commonalities...

constant experimentation mode, either. Transitional technologies and solutions can ease migration from older to newer standards/technologies (Dedra, +100 Laura) - also see Stone 12, Stone 14, stone 24

## Stone 25

We should be more agnostic to authentication/authorization protocols. (David, +1 Laura, +1 Dedra - See Stone 13)

**Commented [31]:** This extends to protocol implementations that we may consider to be "substandard" for whatever reason. (Discussion of Stone 10)

## Stone 26

(Laura) What is the easy (straight-forward) path for implementation? Does complication work against us? - See Stone 10

- More experts needed to do our work (but those new in their career and not choosing this)
- Complex configurations needed (but to what end? What would we lose if we remove the complexity?)
- Long startup times ("plug and play" solutions are selling their ease of implementation, at least some are choosing this - do we provide a better alternative to the easy path?)
- Implementation/engagement out of reach for too many (can we bring them into the community without their technical & engagement overhead going up?)

**Commented [32]:** Extensive monitoring may be needed to achieve a high degree of ease in addition to great and simple packaging of software and processes for joining federation. Policy consistency across national feds, as well as fed members, also prerequisite. And standardization across services to enable federated access to them.

<https://xkcd.com/2347/>

## Stone 27

There is a distinction between academic (or global) interfederation (perhaps much broader in community than that of some of the R&E federations) - stone 11, 18 - and the specific authorization claims Stone 4 (judith)

## Stone 28

Survey current industrial efforts that are relevant to federations, e.g., identity linking capabilities of Radiant Logic. Also See Stone 25, 12, 17, 29, 30 Compare to Stone 13

**Commented [33]:** Don't reinvent wheels; leverage good practices wherever they are; don't be afraid of commercial providers if they have a good solution.

## Stone 29

How to leverage commercial efforts and standardization efforts? - Also See Stone 25, 12, 17, 28, 30 Compare to Stone 13

**Commented [34]:** Might a Voice of Academic Interfederation reach out to an industry that could benefit from multilateral federation, and gain a strong supporter?

## Stone 30

There is a whole ecosystem of different ID solutions out there - are the current federations too isolated from other activities? (Alan)- Also See Stone 25, 29, 12, 17, and Stone 28 Compare to Stone 13

**Commented [35]:** Integration between Academic Interfederation and other, mostly commercial, identity systems.

## Stone 31

Trust who? We put a lot of energy to talking about 'trust federations' though there are times when this aspiration falls apart. Do IdPs trust SPs? Does federation A trust federation B? And, what are the conditions of this trust? Is trust really the cornerstone of our offering, or is it something else? (Laura) Stone 4? Stone 9?

- <http://doi.org/10.26869/TI.3.2>

Trustmark discussion identifies the multiplicity of contractual assertions that may be needed in academic interfederation that one federation may not be able to assert. Allows asserting a certification independent of a federation's choice to support it.

**Commented [36]:** How far can we go without auditors, contracts, and treaties?

## Stone 32

Lead through partnership. (David) CF Stone 10 Also cluster Stone 25, 12, 17, 29, 30

Email thread about Stone 31 (in chronological order):

David W:

We ran out of time for our discussion of Stone 31 today. I said I had more thoughts but also wanted to move on to Stone 32. Here's what I was thinking...

We were talking about the need to support "certifications" to an entity, when the entity's federation does not (or cannot) issue that certification. Judith gave the example of a US entity that has gotten some legal certification from the EU. The desire is to assert that certification in metadata, but InCommon doesn't support it. Unfortunately, we got mired in the difficulties inherent in a US organization getting a EU certification in the first place.

So, here are a couple of other, perhaps more concrete/feasible, use cases.

- A few years ago, R&S certification could be done by only a few federations. This created a "speed bump" for global adoption. If it were possible for an SP to obtain R&S certification from a federation other than one's own, we likely would have seen quicker adoption.

- The University of California has a growing number of enterprise services that all campuses must access. Analogous to R&S, this requires all campus IdP administrations to enable attribute release for each of those services. The ability for UC to certify services as "UC Approved for the Enterprise" would obviate a lot of the manual labor. (That said, this was discussed years ago between UC and InCommon. I believe it didn't move forward, as the UC campuses couldn't agree on what "UC Approved for the Enterprise" meant, hearkening back to the practicality issue that Tom mentioned in today's discussion. It may be that R&S was a fluke, and that getting multi-institutional agreement on this kind of thing, even at a small UC-sized scale is rare. If the mechanism were there, though, I think we'd see it's not so rare.)

Alan B:

Maybe the trust section is better thought of as a journey - the federations try to gain trust and work with ways of improving it... if something can be adopted or adapted then it will...at some point. This is why I thought of it as a journey. sometimes patience is needed...but not too much as otherwise things never get done ;-)

David W:  
agreed.

Alan B:

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how to tell if an organisation is 'R&S' - usually only the regional federation has any way of knowing.... but its not just the vetting of that - its also eg tooling so that such statements can be in metadata and checked etc. but this does bring into play the other question here... its 'easy' to put things into metadata (given suitable placeholder etc etc)... but if I say 'add this' how does the operator know or trust that value. what stops me from just asserting some value. where is the checking or vetting service.... we'd need some registration authority that a code can be given to to get the response...a clearing centre or such (like eg certification companies have to prove that Miss S really does have a Cisco certification and it hasnt expired etc) . this is some extra infrastructure... (obviously, big things already have such checking services....but where and how does 'UC Approved for the Enterprise' get stored for checking? a DNS entry in their domain signed etc?

David W:

I agree that we need technical mechanisms that don't currently exist to do this. For this Federation 2.0 work, though, I'm assuming we're looking somewhere around 10 years into the future, so 1) we're identifying needs, not solutions (although we are talking about structures that can create solutions), and 2) there's plenty of time to develop and deploy those solutions.

[But since you bring up implementation... I'd be tempted to use a distributed metadata distribution scheme like OIDC<sub>r</sub>, identifying self-asserted certifications with URLs that also link to verification services with endpoints for the certification's definition, etc., as well as verification itself. Which verification services an entity trusts would be up to the entity, but federations could distribute a list of trusted verifiers that are suitable for the community as defaults. There are other ways to do this, of course, digital signatures with trusted public keys, for instance.]

Tom B:

What I'm hearing in this thread is the need for Academic Interfederation to address use cases requiring greater "assurance" or mitigation of other forms of risk for which the current level of trust, ie, that engendered by sharing a common mission and demonstrating responsibility for a community-agreed baseline of operational expectations, is eclipsed by external regulation of some sort. Does that sound right?

David W:

Yes, I think so, Tom. I wouldn't necessarily use the words "eclipse" or "regulation," but the idea is to accommodate different criteria than the community's baseline. The baseline remains, but subsets of the community may need something else, as well, that may not be applicable (or even available at the current time) to the rest of the community.

**Page 3: [1] Commented [17] Judith Bush 7/22/20 3:34:00 PM**

the primary source of the institution's identity data; as this happens different barriers to integration may be introduced while new capabilities may be introduced.

**Page 3: [2] Commented [19] Thomas Barton 7/22/20 3:44:00 PM**

This might also mean Acad Interfed needs to take into account the fact that different countries are in different stages of development of the federation concept and operation.