



InCommon Partnership Models and Trust Fabrics

Mark Johnson
Mark Scheible
Ann West
John Krienke
David Walker



Overview and Motivation

- Accelerate development of a business model that supports CAIs
- MCNC offered to work intensively with InCommon
 - Mark Scheible, Mark Johnson
 - John Kreinke, David Walker, Ann West
- All day meeting in Chicago September 19
- Fully develop one model for serving CAIs that would offload cost from inCommon ...and lower cost for CAIs
- Fighting off urge and encouragement to increase our scope



Our approach

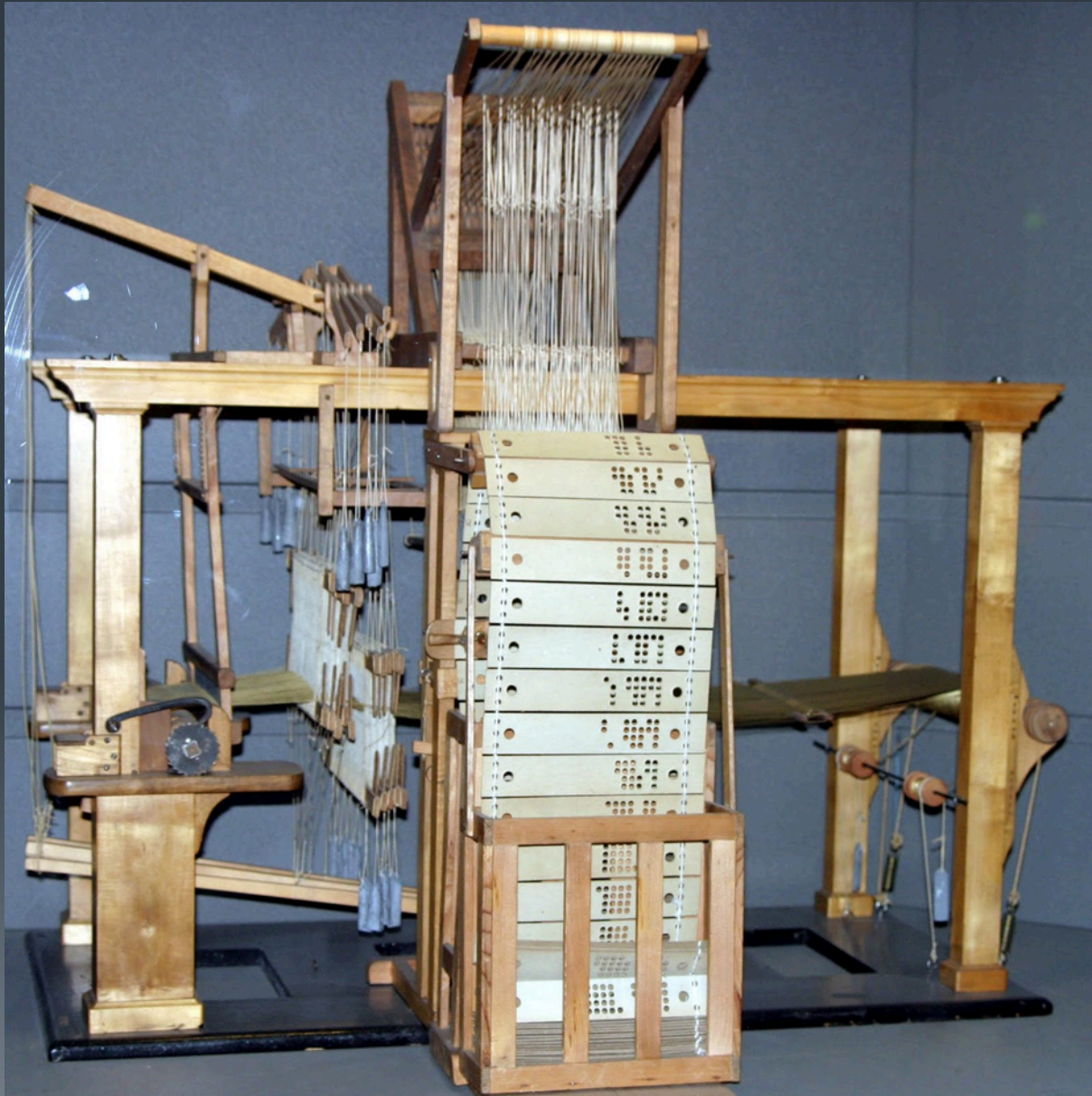
- Break down the work of building the InCommon trust fabric into its atomic units
- Look at how those parts could be shifted around to offload InCommon
- Focus on one approach that appeals to MCNC
- Develop “term sheets” describing the content needed in agreements between InCommon, the regional (MCNC), and downstream organizations
- While we’re at it write up what we’ve done in a short white paper



Where we stand now

- Paper is done – you have it
- Term sheets are our next focus area
- Develop some real cost numbers
- Begin to put a new model in place at MCNC

Maintaining a Trust Fabric



Maintaining a Common Trust Fabric

- Governance
 - Defines eligibility, promises and behaviors, terms, fees, and policies of participation
 - Defines common vocabulary & usage rules: identifiers, attributes (eduperson), their sharing, storage, & privacy
 - Defines Interoperability technologies: standards, software, services & trust mechanisms
- Operations, Support, Outreach
 - Verifies organizations, trusted officers, and entity metadata
 - Securely collects, validates, decorates, and redistributes metadata
 - Provides support: documentation, help desk, training, community
 - Creates additional frameworks for trusted exchange: attribute release mechanisms, levels of identity assurance, privacy and consent
 - Back office invoicing, accounts receivable, legal negotiations, financial audit, etc.
- Moving forward
 - Additional services & partnerships for easy adoption, interop, & scale
 - From descriptive to normative practices
 - From the large few to the many small adopters, from national to internationally aligned fabrics



Atomic Units: Low Hanging Fruit

Background Information for Regional / InCommon Collaboration

Business Relationship

- **Maintains financial, legal, and policy relationship**

Registration Authority (RA)

- Establishes the federation “trust” with the candidate organization
 - Vetting of the Organization and its Internet DNS domains
 - Vetting of the Organization’s People
 - The Executive
 - One or two Site Administrators (SA)

Metadata (MD) Management

- Verifies content and policy adherence, ensures integrity and access
- Testing/Inspecting submitted MD according to community requirements
 - Signing and publishing the Metadata Aggregate (MDA) of the federation
 - Hosting the MDA for federation members to download

Current

| | |
|----------|--|
| Services | RO joins InCommon directly No Regional services provided to RO |
| Legal | No: InCommon/Regional Yes: InCommon/RO |
| Cost | InCommon published feeds incommon.org/fees |



Facilitation and Support

| | |
|----------|--|
| Services | Regional may assist RO w/ <ul style="list-style-type: none">• Legal• Training and support• Local identity management• Hosting services RO joins InCommon directly |
| Legal | Maybe: InCommon/Regional Yes: Regional/RO Yes: InCommon/RO |
| Cost | InCommon published fees: incommon.org/fees |



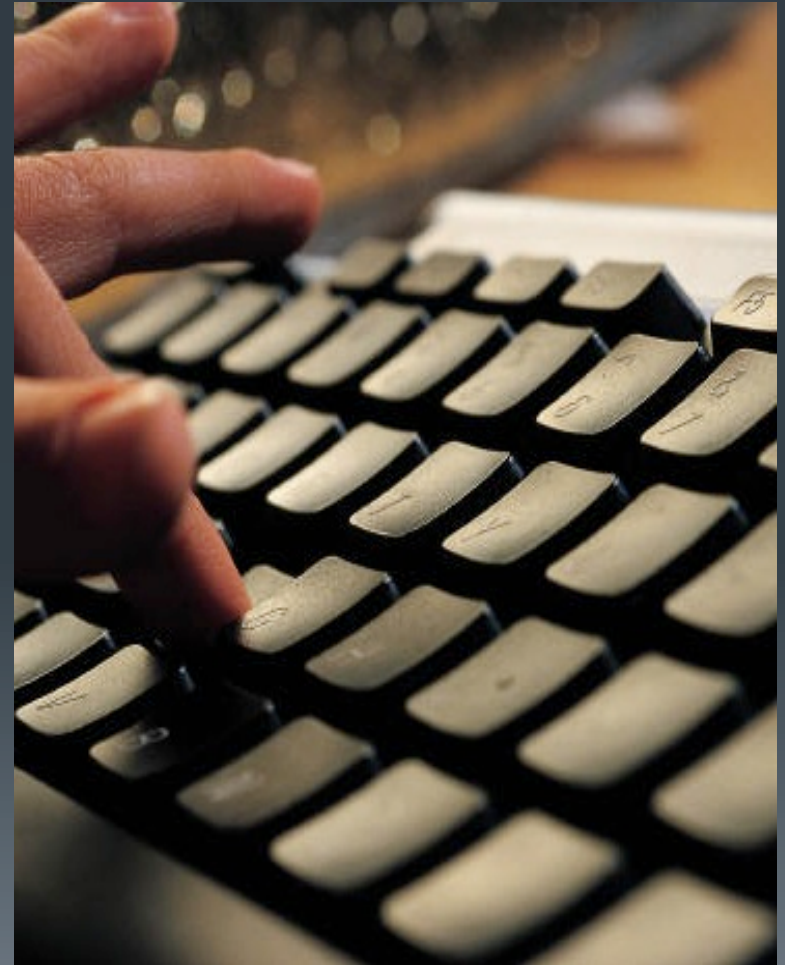
Business Partnership

| | |
|----------|--|
| Services | <p>Regional provides RegAuth and Relationship Mgmnt</p> <ul style="list-style-type: none">• Contact Vetting/Mgmnt• Perform legal/billing support• Probably check all metadata submitted by in-scope domains• Provide optional facilitation/support services to ROs <p>RO may or may not join InCommon</p> |
| Legal | <p>Yes: InCommon/Regional Yes: Regional/RO Maybe: InCommon/RO</p> |
| Cost | <p>Shared between Regional and InCommon</p> |



Technical Steward

| | |
|----------|---|
| Services | <p>Regional provides tech support to RO</p> <p>Provides InC metadata vetting and submission</p> <ul style="list-style-type: none">• May submit metadata for RO• Check all metadata submitted by in-scope domains• Optional hosting• Optional facilitation and support <p>RO may or may not join InCommon</p> |
| Legal | <p>Yes: InCommon/Regional</p> <p>Yes: Regional/RO</p> <p>Maybe: InCommon/RO</p> |
| Cost | <p>Shared between Regional and InCommon</p> |



Full Service Partnership

| | |
|----------|--|
| Services | Regional provides <ul style="list-style-type: none">• Facilitation and Support• Business Partnership Services<ul style="list-style-type: none">• RA, Admin, Billing• Technical Steward Services<ul style="list-style-type: none">• Metadata mgmnt and submission RO may or may not join InCommon |
| Legal | Yes: InCommon/Regional Yes: Regional/RO No: InCommon/RO |
| Cost | Shared between Regional and InCommon |



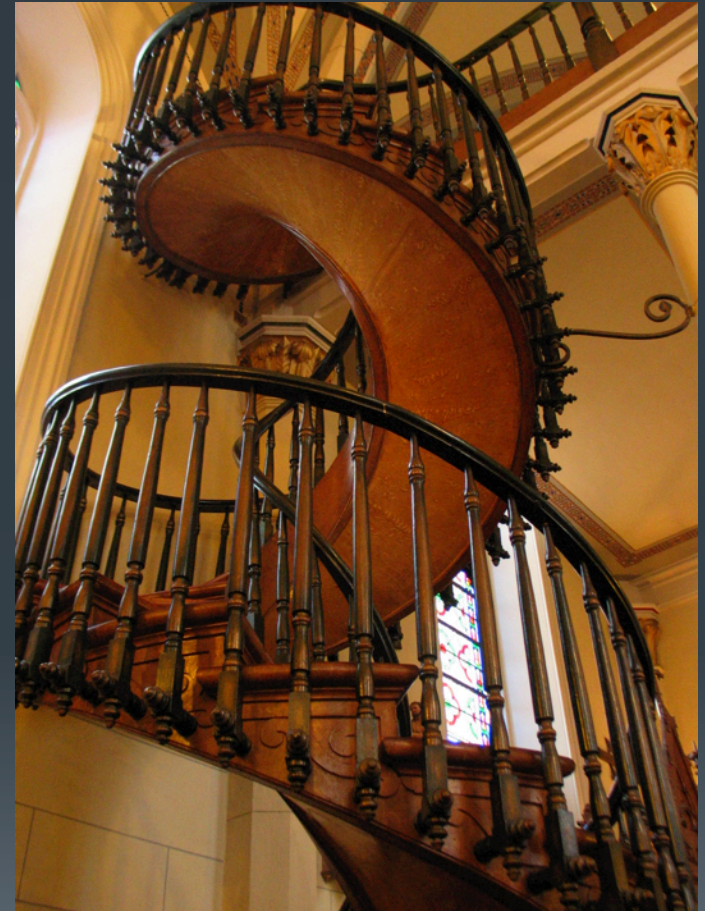
Regional Federation Operator

| | |
|----------|---|
| Services | Independent Federation Operator <ul style="list-style-type: none">• Manage all services for Federation• No services or support from inCommon• Optional metadata sharing with InCommon |
| Legal | Maybe: InCommon/Regional if metadata is exchanged Yes: Regional/RO No: InCommon/RO |
| Cost | Regional bears all cost |



Next Steps: InCommon/MCNC

| | |
|--------------------|---|
| Legal | <ul style="list-style-type: none">• Third Party IdP & SP representation• Submission into InCommon metadata aggregate• Compliance• RA validation partnership (Registration Authority)• Eligibility Classification• Defined constituencies• Non exclusive |
| Pricing Principles | <ul style="list-style-type: none">• Sustainability for all: ability to pay• Not transaction based• Unit of price: IdPs• SPs drive IdPs (5:1)• Standardization & Transparency• Fixed Costs and Variable Costs |
| Pricing | <ul style="list-style-type: none">• Lump Sum -or- Unit by Unit• Tiers |



Maintaining a Common Trust Fabric: Fixed and Variable Costs

- Governance
 - Defines eligibility, promises and behaviors, terms, fees, and policies of participation
 - Defines common vocabulary & usage rules: identifiers, attributes (eduperson), their sharing, storage, & privacy
 - Defines Interoperability technologies: standards, software, services & trust mechanisms
- Operations, Support, Outreach
 - **Verifies** organizations, trusted officers, and entity metadata
 - Securely **collects, validates**, decorates, and redistributes metadata
 - Provides **support**: documentation, **help desk, training, community**
 - Creates additional frameworks for trusted exchange: attribute release mechanisms, levels of identity assurance, privacy and consent
 - **Back office** invoicing, accounts receivable, legal negotiations, financial audit, etc.
- Moving forward
 - Additional services & partnerships for easy adoption, interop, & scale
 - From descriptive to normative practices: **transitions & migrations**
 - From the large few to the many small adopters, from national to internationally aligned fabrics

InCommon K12/CC Grant

- Requested by Regional partners in October 2013; approved by Steering in November 2013
- To encourage experimentation and adoption
- For each pilot Regional:
 - Annual participation free-of-charge for five qualified K12 or community colleges in 2013 and 2014, with no one-time registration fee.
 - Qualifying organizations will be verified on a state-by-state basis in partnership with a relevant Internet2 Regional member.
 - Published fees will apply in 2015.

