

Proposal: Introduce consortium_ops for membership management

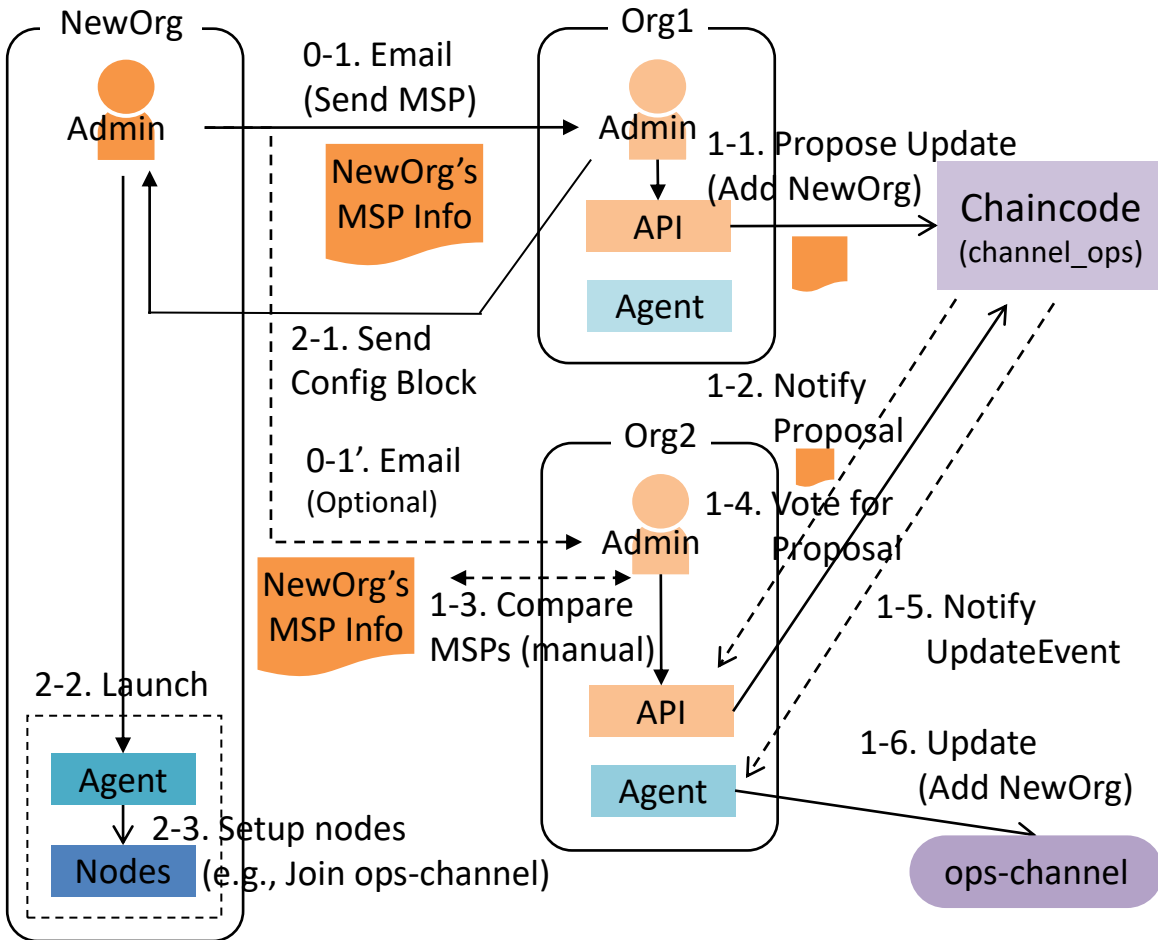
With the proposed "consortium_ops" chaincode and improvements to the API servers, the procedures to add new organizations to the existing consortium will be automated and simplified.

A typical flow would be:

- A new organization requests existing member organizations (Step 0-1)
- The organizations send URLs and temporary credentials for their API servers (Step 0-2)
- The new organization sends its MSP information to the API servers, and the OpsSC updates the membership information for the consortium and the OpsSC channel (ops-channel) (Steps 1-*)
- The new organization launches the OpsSC agent and nodes, and the agent setup the nodes (Steps 2-*)

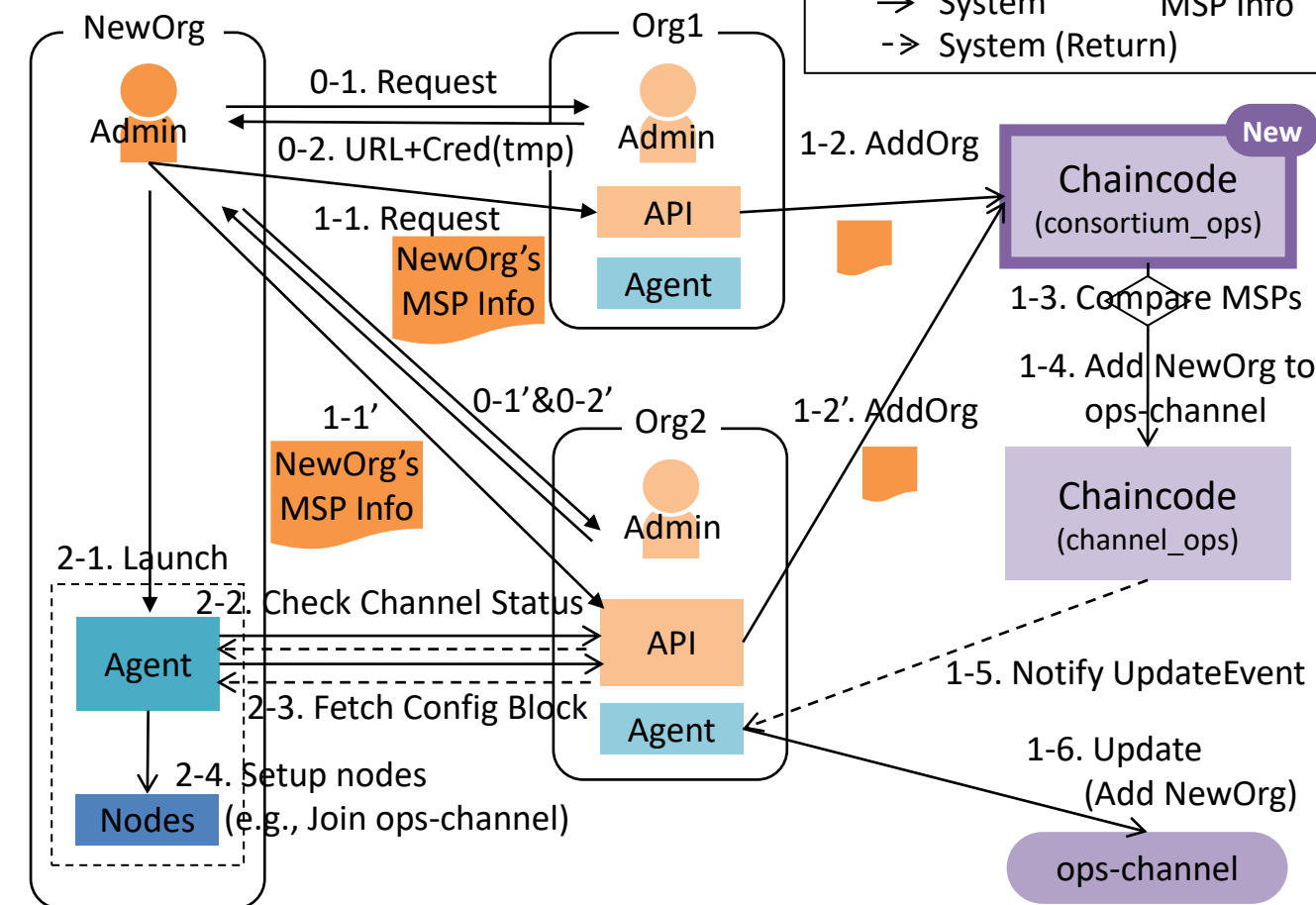
Flow comparison when adding a new organization

Current implementation:



- Existing Org proposes to add NewOrg (using MSP) **instead of NewOrg**
- Existing members need to **manually** verify MSP info for NewOrg **off-chain**
- **A lot of manual work remains** in the process of starting up NewOrg env.

Improvement(proposal):



- **NewOrg itself can propose** to add NewOrg (using MSP)
- Existing members can **automatically** verify MSP info for NewOrg **on-chain**
- **Expand the scope of automation** of the process of starting up NewOrg env.

Legend

- Manual
- System
- > System (Return)
- NewOrg's MSP Info

- When adding a new org/orderer, the following procedures are outside OpsSC
 - Tasks to be completed in each org: preparing CA, issuing keys/certs for nodes, launching nodes
 - Passing info before joining the network: nodes' certs, system config block
 - Agent automatically catches up (join existing channels, deploy existing chaincodes) on the 1st launch
- ➔ After initial setting, channel/chaincode across organizations can be managed with just the OpsSC

