1.) Modify Device Blacklist

Pictured in this slide is the proposed flow when a device blacklist definition changes. This could be any CRUD operation.

• A user or application uses the ProvisionWatcher API to change blacklist information
• The blacklisted device names (or their removal) are published via some mechanism (MQTT shown above, original POC used Kuiper CLI)
  • TBD: Define event(s) related to blacklist CRUD operations
• Kuiper receives the incoming event and updates the respective matching pattern
Pictured in this slide is the proposed flow when a newly onboarded device name matches a blacklist definition.

- The device service onboards the device via core-metadata. A DeviceOnboarded event is published, indicating the new device name.
- Kuiper attempts to match the device name to a blacklist definition. If there is no match, we’re done.
- If Kuiper finds a match, it forwards the DeviceOnboarded event to AppFunctions for handling.
- AppFunctions should then call core-metadata’s DELETE /api/v1/device endpoint to remove the device. AppFunctions can also perform other operations here – sending notifications, incrementing telemetry counters, etc.
- Core-metadata, in turn, should notify the associated device service that the rogue device has been blocked.