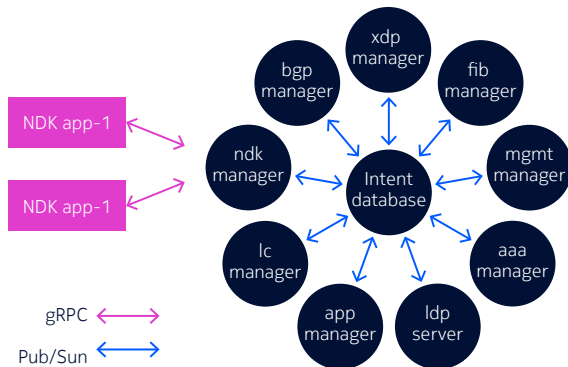


**Operational challenge:** Write custom operational tools (a.k.a agents) to solve operational issues unique to each specific environment.

## Solution

- All systems publish (e.g., Pub) configuration and state information to the Intent Database (IDB) and can subscribe (e.g., Sub) to receive these updates from the IDB.
- Each custom NDK application (e.g., app-1, app-2) communicates as an gRPC client to the “ndk mgr”.
- Each NDK app registers and subscribes to other system services through the “ndk mgr”.
- NDK apps contain their own YANG data model.



## Differentiation

- **Language agnostic**  
Any modern programming language can be used such as Go, Python, C, Java, Ruby. Etc.
- **System independent**  
Since we decouple the app from the system, a NOS update will not require the app to be recompiled.
- **Equal treatment**  
Managed and treated equally as native services in the NOS.
- **Deep integration**  
NDK apps deeply integration with the SR Linux system and have access to RIB/FIB updates or other info in the datapath.

[Learn more](#)