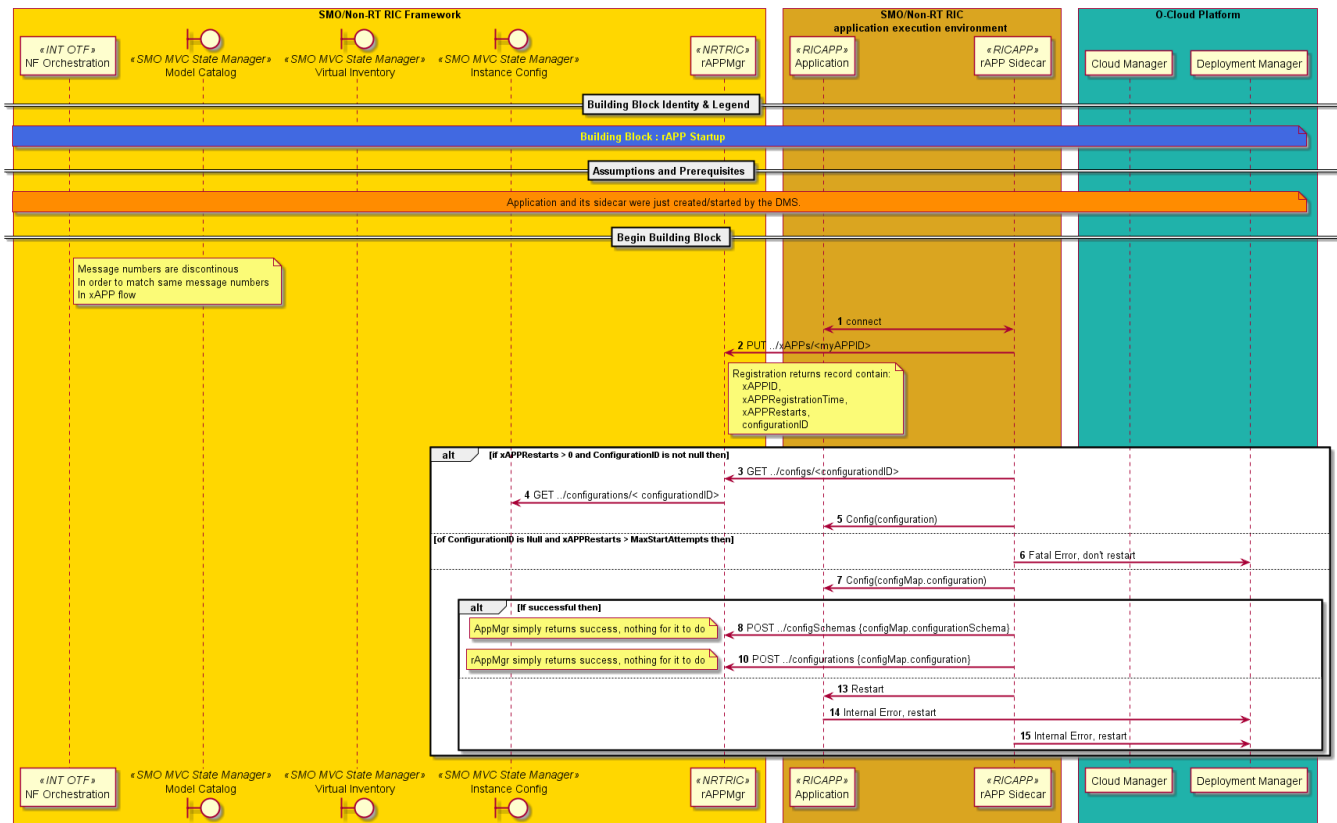


# Cherry rAPP Startup

Sequence Diagram



```

@startuml
Autonumber
Skinparam sequenceArrowThickness 2
skinparam ParticipantPadding 5
skinparam BoxPadding 10

Box "SMO/Non-RT RIC Framework" #gold
    participant NFO as "NF Orchestration" <<INT OTF>>
    Boundary MC as "Model Catalog" <<SMO MVC State Manager>>
    Boundary VI as "Virtual Inventory" <<SMO MVC State Manager>>
    Boundary IC as "Instance Config" <<SMO MVC State Manager>>
    Participant AppMgr as "rAPPMgr" <<NRTRIC>>
end box

Box "SMO/Non-RT RIC\application execution environment " #goldenrod
    participant App as "Application" <<RICAPP>>
    participant Sidecar as "rAPP Sidecar" <<RICAPP>>
end box

Box "O-Cloud Platform" #lightseagreen
    participant IMS as "Cloud Manager"
    participant DMS as "Deployment Manager"
End box

== Building Block Identity & Legend ==

note over NFO, DMS #royalblue
**<color: yellow>Building Block : rAPP Startup </color>**
end note

== Assumptions and Prerequisites ==

note over NFO, DMS #darkorange
Application and its sidecar were just created/started by the DMS.
end note

== Begin Building Block ==

Note Right of NFO
Message numbers are discontinous
In order to match same message numbers
In xAPP startup
End note

    Sidecar <-> App : connect
    Sidecar -> AppMgr : PUT ../xAPPs/<myAPPID>
    Note right of AppMgr
    Registration returns record contain:
        xAPPID,
        xAPPRegistrationTime,
        xAPPRestarts,
        configurationID
    end note

    alt if xAPPRestarts > 0 and ConfigurationID is not null then
        Sidecar -> AppMgr : GET ../configs/<configurationID>
        AppMgr -> IC : GET ../configurations/< configurationID>
        Sidecar -> App : Config(configuration)
    Else of ConfigurationID is Null and xAPPRestarts > MaxStartAttempts then
        Sidecar -> DMS : Fatal Error, don't restart
    Else
        Sidecar -> App : Config(configMap.configuration)
        Alt If successful then
            Sidecar -> AppMgr : POST ../configSchemas {configMap.configurationSchema}
            Note left : AppMgr simply returns success, nothing for it to do
        Autonumber 10
            Sidecar -> AppMgr : POST ../configurations {configMap.configuration}
            Note left : rAppMgr simply returns success, nothing for it to do
        Else
        Autonumber 13
            Sidecar -> App : Restart
            App -> DMS : Internal Error, restart
            Sidecar -> DMS : Internal Error, restart
        End if
    End if

@enduml

```