

XFS4IoT SP-Dev Workgroup

1 February 2022

- Recap from previous meeting
- XFS4IoT Specification first release and what it means for the industry
- Auxiliaries release
- VendorMode and VendorApplication release
- XFS4IoT SP-Dev framework overview
- What's next

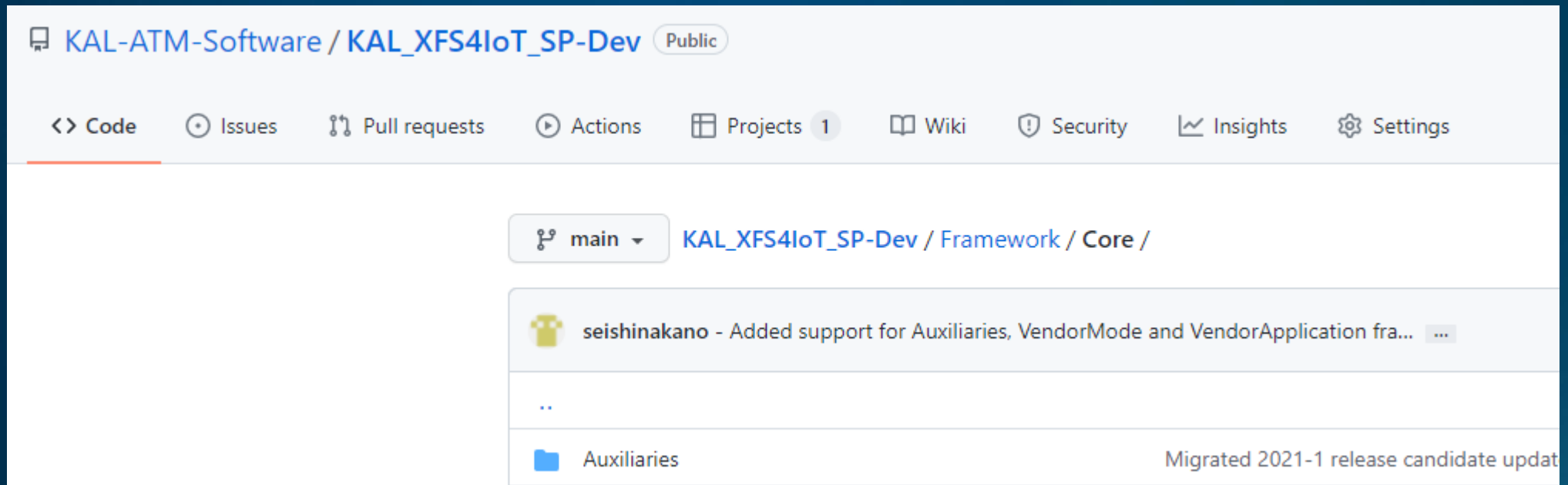
- Frameworks are now completed to support a complete Cash Out ATM. All now available with C# and C++ sample code released and demos on YouTube.
 - ✓ Card Reader (released May 2021) with support for dispensing (Nov-21)
 - ✓ Cash Dispenser (Jul-21), without end-to-end security
 - ✓ Text Terminal Unit (Jul-21)
 - ✓ EPP Key Management and Crypto classes (Sep-21)
 - ✓ Keyboard and PinPad classes (Oct-21)
 - ✓ End-to-end security partially complete (Oct-21); added required functions (Nov-21)
 - ✓ Printer / Guide lights (Nov-21)
 - ✓ Vendor Mode and Vendor Application (Jan-22)
 - ✓ Auxiliaries (Jan-22)

- The Global CEN XFS Committee has released the official version of XFS4IoT to the European CEN organization for publication
- The official **[specification 2021-1 release candidate](#)** is publicly available on GitHub prior to final publication by CEN
- The workgroup's framework has been updated to support the published version of the XFS4IoT spec

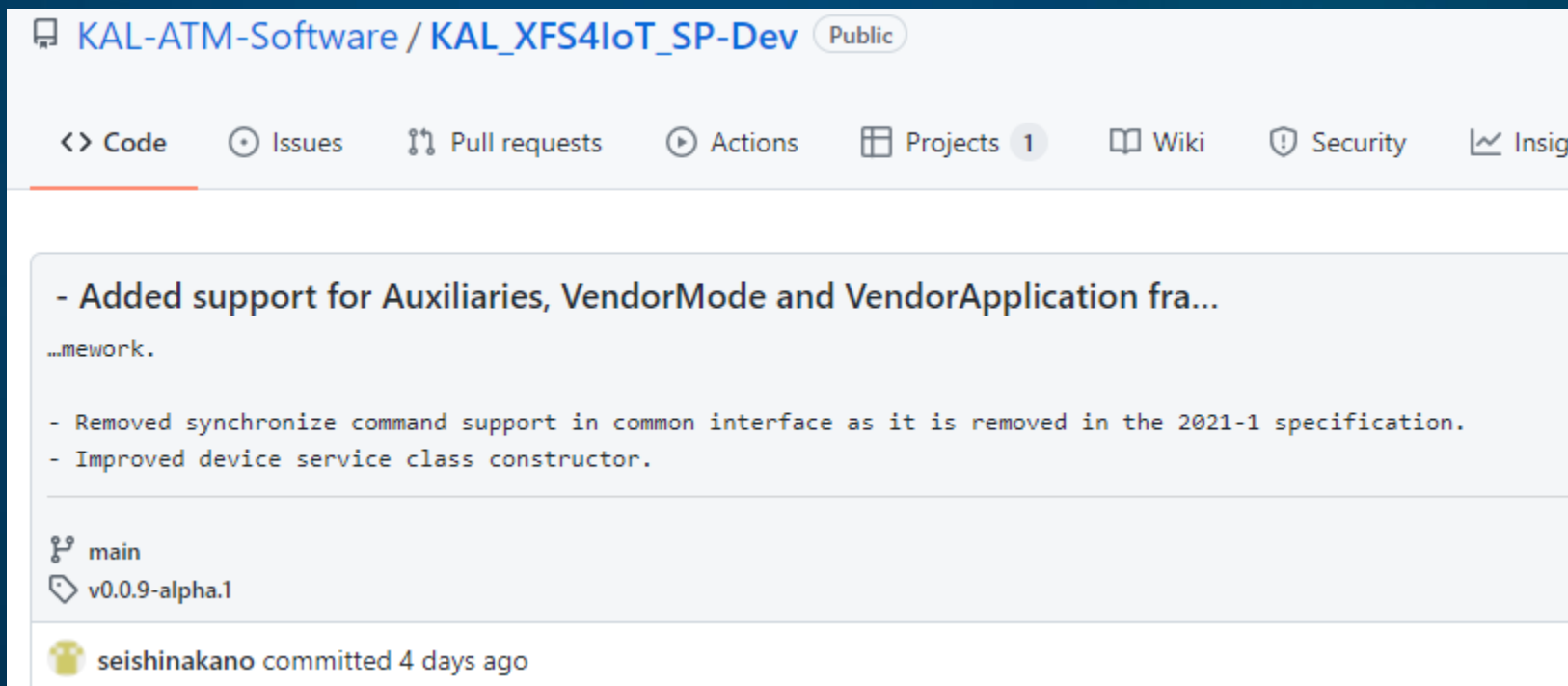
- The XFS4IoT specification was published and the Workgroup's framework code was updated and is available
- It is time to implement production XFS4 SPs

Auxiliaries class release

- Auxiliaries class now available:

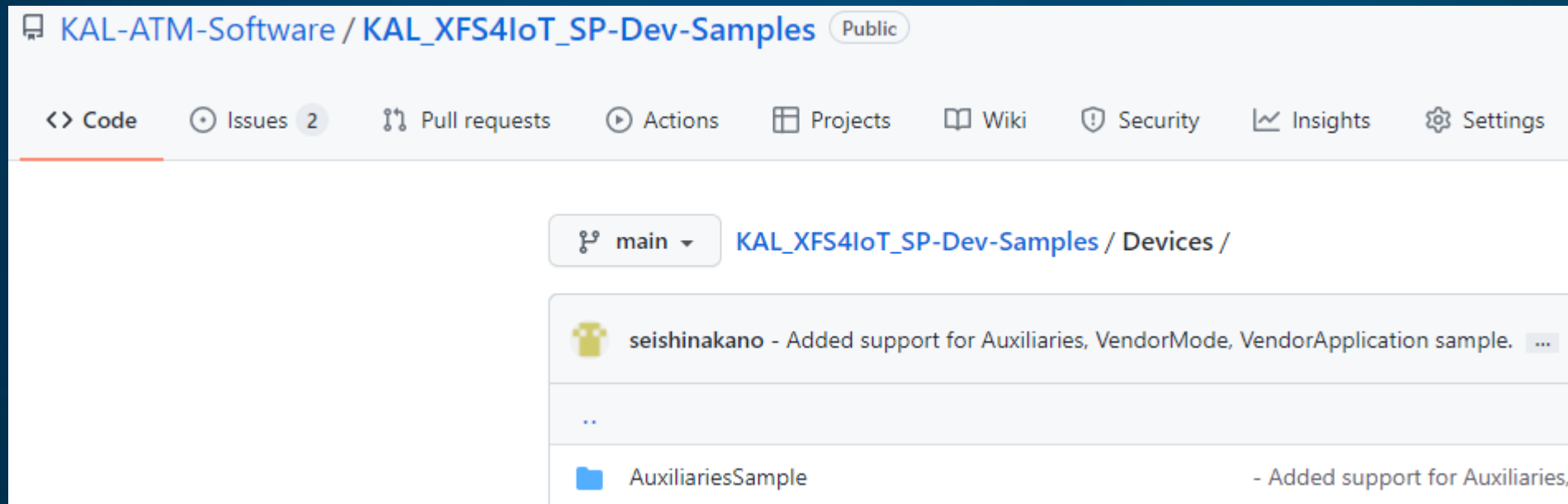


- Details of the changes in the following commit:



The screenshot shows a GitHub repository page for `KAL-ATM-Software / KAL_XFS4IoT_SP-Dev`, which is marked as `Public`. The navigation bar includes links for `Code`, `Issues`, `Pull requests`, `Actions`, `Projects` (with a count of 1), `Wiki`, `Security`, and `Insights`. The commit message is displayed in a light blue box and reads:
- Added support for Auxiliaries, VendorMode and VendorApplication fra...
...mework.
- Removed synchronize command support in common interface as it is removed in the 2021-1 specification.
- Improved device service class constructor.
Below the message, the commit is associated with the `main` branch and the tag `v0.0.9-alpha.1`. At the bottom, it shows the commit was made by `seishinakano` 4 days ago.

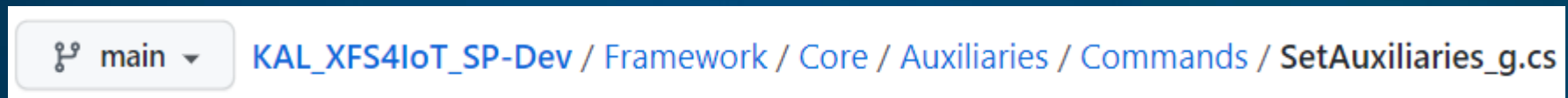
- Sample available
- Specific commit for all sample changes:



- Device support includes:
 - Sensors
 - Doors
 - Indicators
 - UPS

This class is known as SIU in XFS3 which is now split between Lights and Auxiliaries interfaces in XFS4IoT

- SetAuxiliaries command allow to control the main settings such as SafeDoor, CabinetDoors, Audio & Volume Alarm and many more

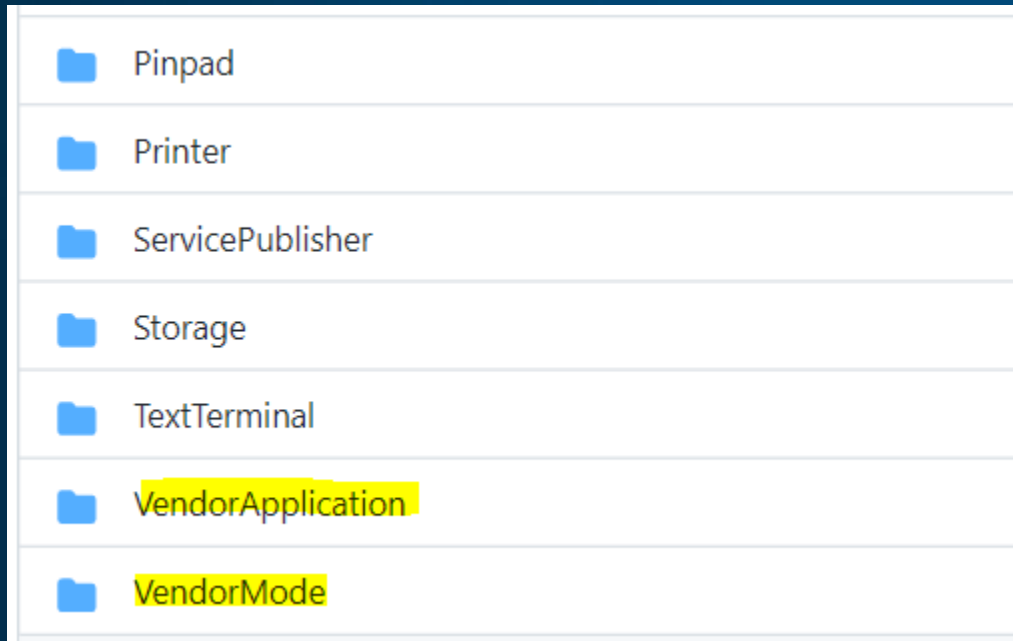
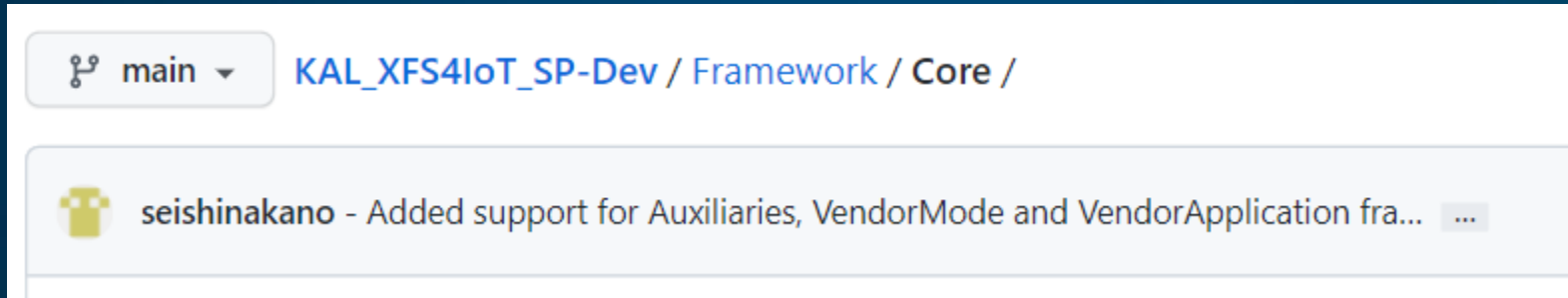


- The AuxiliaryStatusEvent class supports events reporting states for the different sensors, switches, doors...

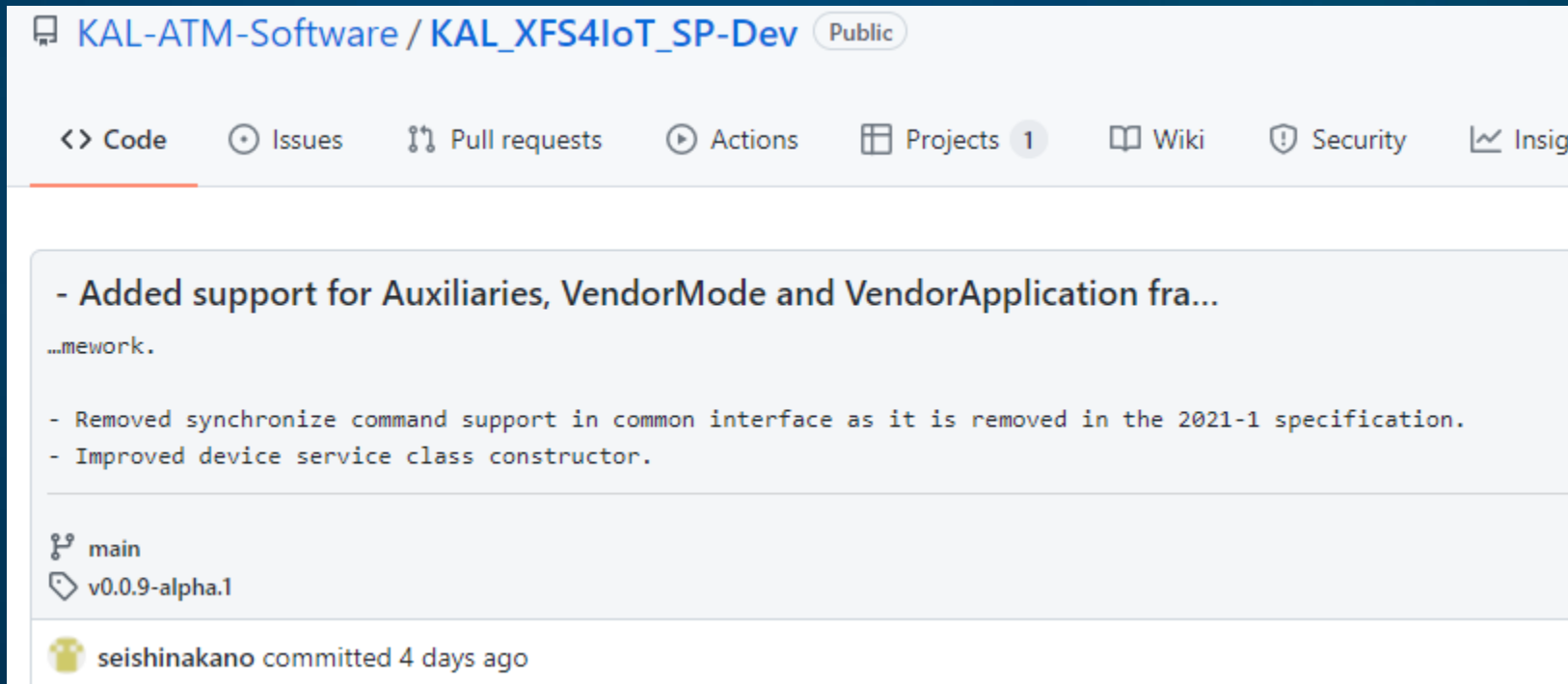


VendorMode and VendorApplication classes release

- Both classes now available:

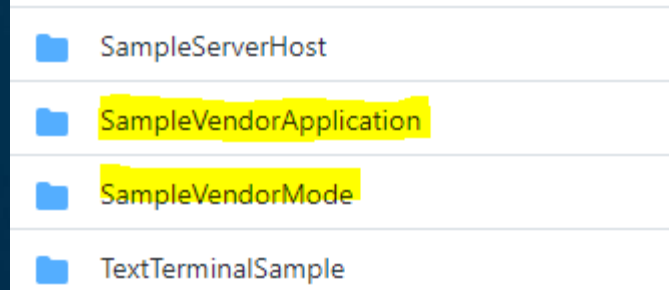
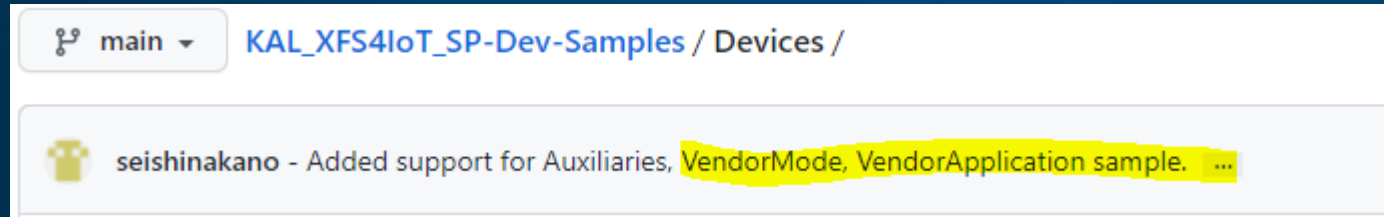


- Details of the changes in the following commit:



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The commit is on the `main` branch, tagged as `v0.0.9-alpha.1`. The commit was made by `seishinakano` 4 days ago.

- Samples available

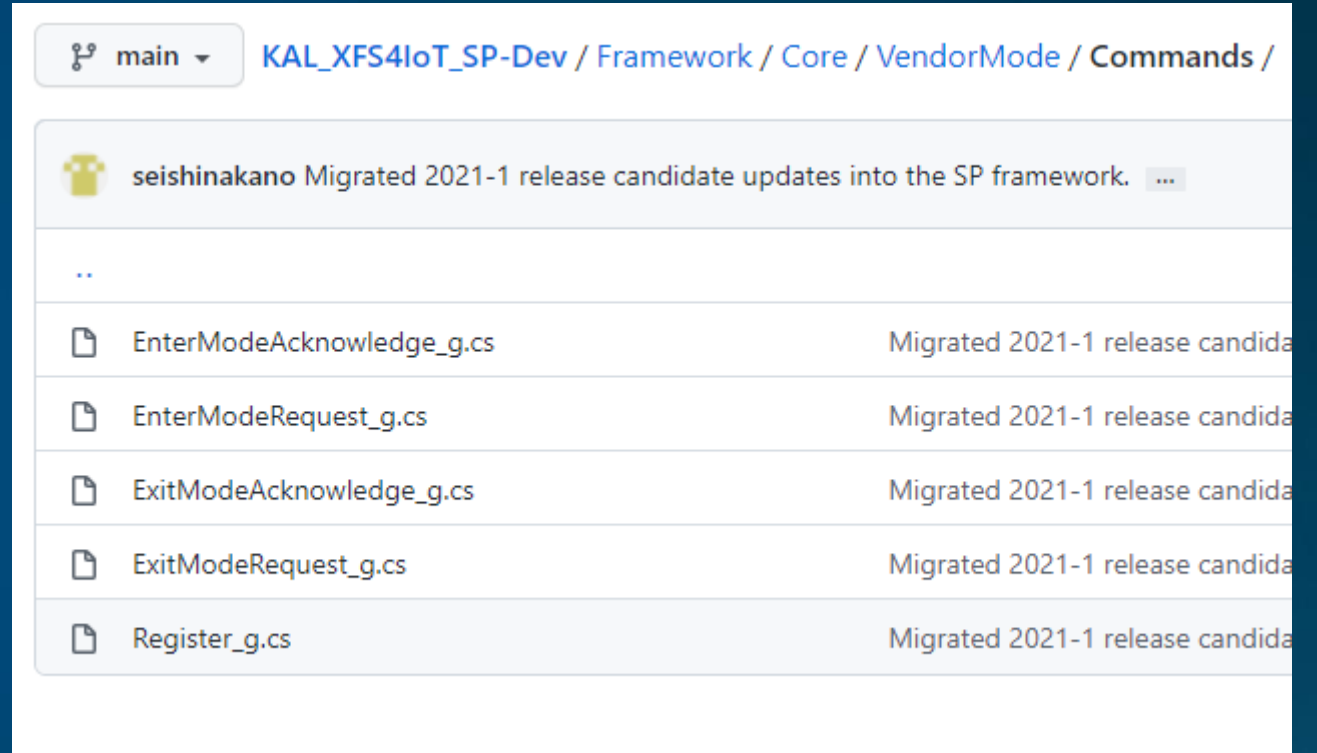


What is supported?








- VDM class in XFS3 now split between VendorMode and VendorApplication interfaces in XFS4IoT
- More flexible – each device can have its own vendor application
- ATM application can control a single device entering/exiting vendor mode

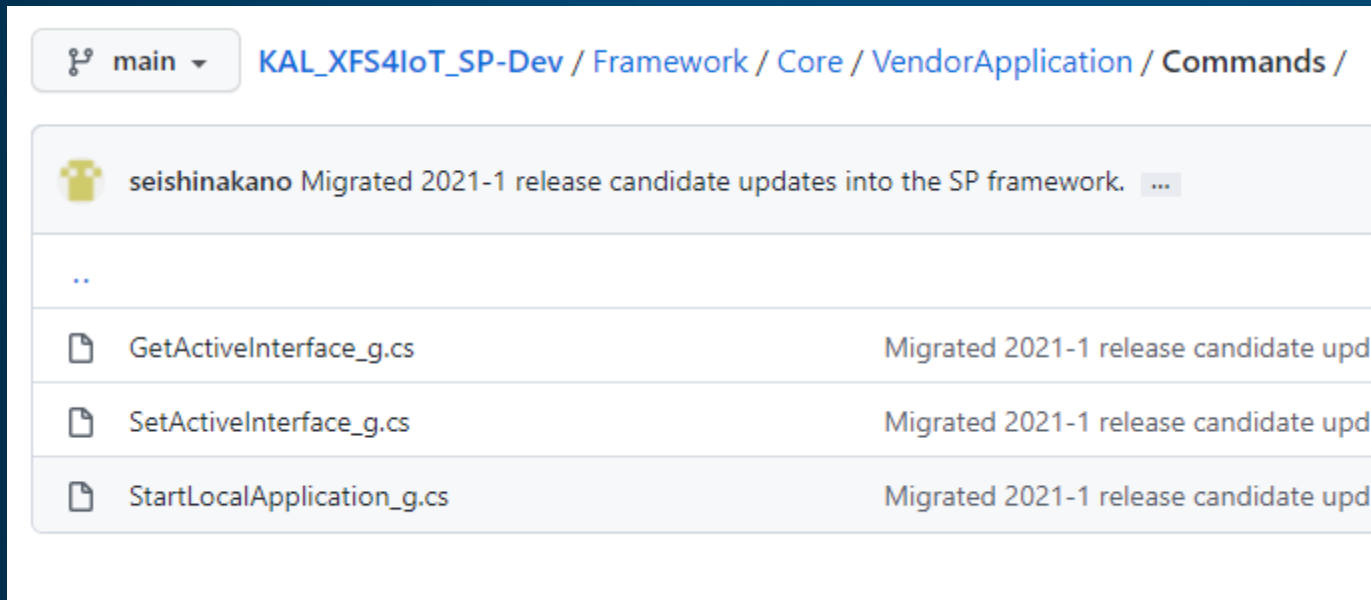
- VendorMode supports:
 - Commands to enter and exit vendor mode
 - Events reporting accordingly vendor mode entered and exited



The screenshot shows a web interface for a code repository. At the top, there is a breadcrumb navigation path: `main` (with a dropdown arrow) / `KAL_XFS4IoT_SP-Dev` / `Framework` / `Core` / `VendorMode` / `Commands`. Below this, a commit message is displayed: `seishinakano` Migrated 2021-1 release candidate updates into the SP framework. Below the commit message, there is a table listing files that were migrated.

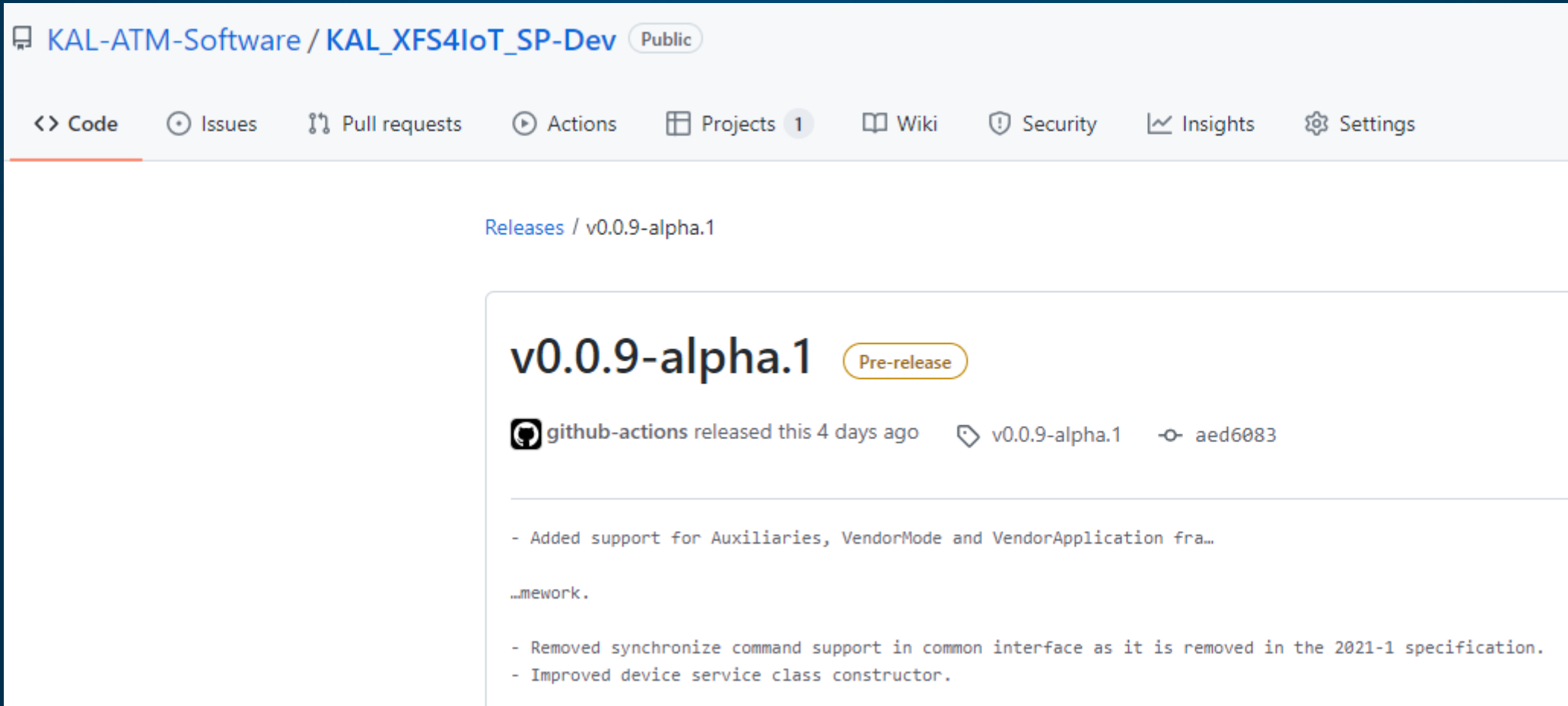
..	
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 <code>EnterModeRequest_g.cs</code>	Migrated 2021-1 release candida
 <code>ExitModeAcknowledge_g.cs</code>	Migrated 2021-1 release candida
 <code>ExitModeRequest_g.cs</code>	Migrated 2021-1 release candida
 <code>Register_g.cs</code>	Migrated 2021-1 release candida

- VendorApplication supports:
 - Set and get the interface to display the vendor application in
 - Start the vendor application via StartLocalApplication command



Status, roadmap and what's next

- Latest Pre-release v.0.0.9-alpha.1 for NuGet packages



The screenshot shows the GitHub interface for the repository `KAL-ATM-Software / KAL_XFS4IoT_SP-Dev`, which is marked as `Public`. The navigation bar includes links for `Code`, `Issues`, `Pull requests`, `Actions`, `Projects` (with a count of 1), `Wiki`, `Security`, `Insights`, and `Settings`. The `Releases` section is active, displaying the `v0.0.9-alpha.1` pre-release. The release is labeled as `Pre-release` and was released by `github-actions` 4 days ago. The commit hash is `aed6083`. The release notes include:

- Added support for Auxiliaries, VendorMode and VendorApplication fra...
- ...mework.
- Removed synchronize command support in common interface as it is removed in the 2021-1 specification.
- Improved device service class constructor.

- Support for all main devices on Cash out ATM
- Support of the new E2E security and Service Discovery features
- Samples available for all the classes supported
- Many demo videos available on the KAL ATM Software YouTube channel [here](#)

- Support for full Cash Out ATM ready now including VendorMode, VendorApplication and Auxiliaries
- The official specification 2021-1 release candidate is publicly available on GitHub
- Framework is updated and compliant with the latest 2021-1 release and will keep being updated regularly

- Support for acceptor and recycler machines
- Next interfaces to come:
 - BarcodeReader
 - Camera
 - Biometric
 - CashAcceptor

- XFS4IoT SPs to be developed
- XFS4IoT is already part of RFPs
- XFS4IoT will evolve faster than XFS3 ever did
- The CEN XFS committee is targeting mid of 2022 for the next release of the CEN XFS4IoT Specification

MS Teams

- First Tuesday of each month at 1300 UK time

Next call: **1st March 2022**, 1300 UK, 0800 US EST, 2200 Tokyo time