# **PACT Conformance Testing Checklist (for Technical Specification V1.0.1 & V2 Conformance)**

***This document is open for feedback and inputs. Please add your feedback / input via Comments***

**Background**: Conformance Definition

*[The following sections are copied from the tech specs. See the respective technical specification for the latest definition.]*

A conforming [host system](https://wbcsd.github.io/data-exchange-protocol/v2/#host-system) is any algorithm realized as software and/or hardware that complies with the relevant normative statements in [§ 6 HTTP REST API](https://wbcsd.github.io/data-exchange-protocol/v2/#api).

A conforming requesting [data recipient](https://wbcsd.github.io/data-exchange-protocol/v2/#data-recipient) is any algorithm realized as software and/or hardware that complies with the relevant normative statements in [§ 6 HTTP REST API](https://wbcsd.github.io/data-exchange-protocol/v2/#api).

This checklist is a recommendation from WBCSD to be used as a reference for the Bilateral Conformance Testing criteria for

# **Checklist of/for Functionality for V1.0.1 & V2**

**Mandatory Functionality**

* Host system has implemented the following **Http actions** as specified and standardized in Pathfinder Technical Specification V2:
* [Action Authenticate](https://wbcsd.github.io/data-exchange-protocol/v2/#action-authenticate)
* [Action ListFootprints](https://wbcsd.github.io/data-exchange-protocol/v2/#action-listfootprints)
* [Action GetFootprint](https://wbcsd.github.io/data-exchange-protocol/v2/#action-getfootprint)
* Host system offers its actions under **https** method only
* Host System performs the **Authentication Flow** for PCF Data exchange as specified in the Pathfinder Technical Specification V2 for all Actions
* Host System endpoint follows the **Request/ Response syntax** for all mandatory actions (Authenticate, ListFootPrints, GetFootPrints) and optional action (Action Events – *not applicable for V 1.0.1*) as specified in the [Pathfinder Technical Specification V2](https://wbcsd.github.io/data-exchange-protocol/v2/#api-action-list-pagination)
* Host System has implemented the **Error Responses** as specified in the Pathfinder Technical Specification V2 [Section 6.9](https://wbcsd.github.io/data-exchange-protocol/v2/#api-error-responses)

# **Additional Checklist of/for Functionality for V2**

**Mandatory Functionality**

* Host system has:
  + Implemented [Action Events](https://wbcsd.github.io/data-exchange-protocol/v2/#action-events) as specified in Pathfinder Technical Specification V2 and PCF data was exchanged successfully

**Or**

* + If not Implemented [Action Events](https://wbcsd.github.io/data-exchange-protocol/v2/#action-events) then it responded to authenticated Action Events calls with an [error response](https://wbcsd.github.io/data-exchange-protocol/v2/#error-response) with code [NotImplemented](https://wbcsd.github.io/data-exchange-protocol/v2/" \l "notimplemented)
* Host system [Action ListFootprints](https://wbcsd.github.io/data-exchange-protocol/v2/#action-listfootprints) implements mandatory server side **pagination** as specified in [Pathfinder Technical Specification V2](https://wbcsd.github.io/data-exchange-protocol/v2/#api-action-list-pagination)

**Optional (sic!) Functionality**

* Host System has implemented Asynchronous request and retrieval of Product Footprints and PCF data was exchanged successfully based as specified in the Pathfinder Technical Specification V2 Section 6.8.4
* Host System has implemented V2 [Section 6.8.3](https://wbcsd.github.io/data-exchange-protocol/v2/#api-action-events-case-1)
* Host System has implemented footprint Filter functionality (refer [this](https://wbcsd.github.io/data-exchange-protocol/v2/#filter))
* Host system has implemented the Partial Result feature (see [details](https://wbcsd.github.io/data-exchange-protocol/v2/#liststatuscode) for the status code 202-case)
* Host System has implemented **Product Footprint Lifecycle events** and rules as specified in Pathfinder Technical Specification V2 [Section 5](https://wbcsd.github.io/data-exchange-protocol/v2/#lifecycle)