

2. FD: Connection to sub system (Asgard) v1.0 2023-04-27

- Connection to Asgard is declared as 'sub system' connection, because it will only be done, if the connection and authentication against the main application (Midgard in this case) succeeded. Currently, Asgard is the only 'sub system'.
- By default, FD Download and FD Web will both read the Asgard URL from the main application's property "**interface.asgard.url**". This property's value is a #-separated list of URLs. Usually, there will be only one URL to Asgard. Only if the customer's users and QC users access the application differently (e.g. via VPN), a second Asgard URL might be necessary. In this case, the URL that the customer's users will use, must be first in the list. The URL for QC users must be last (FYI: All users with the permission `system:useCustomConfig` are considered to be QC users). For example:



The screenshot shows a configuration window for the property `interface.asgard.url`. The window has a title bar with a red icon and the text `interface.asgard.url`. Below the title bar, it says "no comment". There are three sections: "Value", "Persisted value", and "Default". Each section contains a text field with the value `https://prod.lh.quintessence.de/asgard#http://10.200.123.10:8080/asgard/`. At the bottom, there is a note: "Double click text fields to show values defined as list values as a list."

FD will then try the URLs one after the other (calling `/publicapi/heartbeat` to test the connection). For QC users, The list will be reverted, so that the last URL will be the first that is tested.

- For FD Web, the sub system URL can be also configured in its configuration file. FD Web's primary config file is **configuration.fd**, which is located (according to QC standards) in `/apps/qc/flightdeck/conf`. This is a key-value file. The key for the sub system URL is "`subSystem`". The value's pattern is as the same as for the property described above, for example:
 - `subSystem=10.200.123.10:8080/asgard/`
- The main application's property "`interface.asgard.url`" will be ignored if this key is set. It is recommended **to use this approach for all external environments**, because the above mentioned property will be used by FD Download users and the URL in the property might be defined in a way to make sure that FD Download users from different locations can access Asgard and this might not include the web server where FD Web is deployed.

Another reason for this is that the property might define more than one Asgard URL (as described above), but different URLs for customer and QC users are not necessary when using FD Web (because all requests to Asgard will be sent from the same FD Web deployment, no matter, which user uses FD web in a browser).
- Important in all cases is that the sub system URL **must have the same protocol** as the service gateway URL. So when the service gateway URL protocol is `https`, the Asgard URL protocol must also be `https`. Otherwise, the connection to Asgard will fail. Any protocol in the URL will be ignored.
- Hint: With regard to the main application URL (see other document) this means: if no `serverLocations` key is defined in the file `configuration.fd` (which means that `http://localhost` is used to connect to the main application), the sub system URL to Asgard must also not use `https` as protocol.