

# i2b2 Cell Messaging Basics

All cells in the **i2b2 hive** communicate using standard, pre-defined *i2b2 XML request* and *response messages*.

A **request message** is sent from a client to a service and contains information inside the top level `<request>` tag that allows the service to satisfy the request. The `<request>` tag contains a `<message_header>`, `<request_header>` and `<message_body>`.

The service sends back a **response message**, inside a top-level `<response>` tag, which informs the client about the status of the request and may also contain the actual results. The `<response>` tag contains its own `<message_header>`, `<response_header>` and `<message_body>` and it may optionally echo the request's `<request_header>`.

The following image illustrates the basic top-level elements contained within the request and response messages.

