

## Gateways convert inbound enquiries into work for agents and outbound work back into channel-specific interactions. They underpin our entire offering and are essential to customer service.

We use gateways to take input, in any format, and translate it into XML that our system can understand, or the reverse for outbound. So, when a customer communicates with you, a gateway turns their message into work ready for your agents to handle. When you want to send a message back to them, it is pushed out of the agent console in the required format. This allows all interactions to be handled in one place, whatever the channel. In fact, the channel simply determines what type of gateway is needed to process it. The gateway is the physical implementation of the channel.

### Significance

Gateways are key to customer service and interaction. They are the reason we can send information back and forth with customers, or anyone else for that matter. Lokulus takes this to the next level by optimising your gateways. Personalise gateways to your specific business needs, whether this involves retrieving CSV files from a third-party system or something as simple as an email interaction.



### Inbound Gateways

Inbound gateways bring work into the system, from any channel or source. Each channel may have multiple inbound gateways configured for it, operating in different ways. During this, duplicate checking is performed to ensure we don't waste time processing work twice.

There are two types of inbound gateways:

**Listening gateways**, which rely on other systems to push data into them.

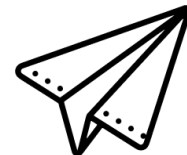
**Polling gateways**, which actively search databases, file systems and third-party sources looking for work.

### Outbound Gateways

Outbound gateways deliver work from within the system to external locations in the required format, for example, an email or a PDF file. The same item of work can also be output through different gateways and in multiple formats.

### Gateway Methods

Gateways vary in their complexity due to the channel they support. Naturally, something like email with a standard, highly structured format can be processed with a simple gateway, whereas some sources are more complicated.



#### Simple Gateways

Some gateways are straightforward and use 1-to-1 mapping to get from A to B. For example, email, Facebook, and Twitter.

**Inbound:** A scheduled task is set to prompt the gateway to connect to a specified server, check its contents, and decide which pieces of work should be retrieved.

**Outbound:** The gateway takes the agent's response and creates their reply by translating it into the required format. For example, for email, it translates the XML in the system into the standard text representation of an email that the SMTP server requires.

#### Complex Gateways

File system gateways are more complicated, and smarter, than those relying on 1-to-1 mapping.

**Inbound:** The gateway is directed to a specific location and selects files to turn into work. A channel is set for the specific location, so the system recognises what they are. For example, if the files represented letters, our system would recognise them as whitemail.



**Outbound:** Work is converted back into a specific format and pushed to a location.

#### Extensible Gateways

Gateways can also integrate with other systems. They can be configured to generate work for sources beyond inbound customer communications, such as from web services, CSV files, FTP files, XSL or XMP files, and MQ services. For example, you could configure a polling gateway that calls on an external database and uses SQL to convert its records into work or, outbound, you could output work to a file server.