

# NotifyLargeFile BOD Tech Sheet

## Definition

### NotifyLargeFile BOD

This BOD communicates information regarding the handling of large files. The LargeFile Noun is used with the Notify Verb, to communicate that a Large File is ready for download.

## NotifyLargeFile BOD Implementation Recommendations

The NotifyLargeFile BOD was originally designed to be implemented in conjunction with the STAR PullMessage Web Service. The BOD allows the web service provider to give the requestor advanced notification during the response to a generic PullMessage request that a large file is available for download.

Without the BOD, and due to the generic nature of the PullMessage service, the requestor might otherwise unexpectedly download a very large file during peak system hours or at some other inopportune time.

The NotifyLargeFile BOD can contain information about each file to be downloaded, and one or more URIs that can be called separately to download each file or file segment, as well as the transport protocol to use as part of the URL string, i.e., "*sftp://myserver/downloads/*".

The requesting application can then automatically schedule the large file retrieval during off-peak hours, or allow the end-user to choose when the large file should be retrieved.

**The STAR Architecture Workgroup have the following recommendations for implementing the NotifyLargeFile BOD.**

- Use the NotifyLargeFile BOD in conjunction with the STAR PullMessage Web Service to provide information about the file (availability, size, location, etc.).
- Polling intervals will be defined by the implementers.

- The implementers should define which secure protocol will be used, if not using a STAR standard transport to retrieve the file (sftp, ftps, scp, https, etc).
- The “out of band” implementation of the file transfer, should define methods that can notify success / failure scenarios, and actions to take in case of failure. APIs provide “exceptions” to handle errors during the file transfer, and processing.
- User credentials, authentication, authorization, certificates, etc. should be implemented “out of band” when using one of the protocols mentioned above.
- The implementers should determine if file compression should be used. It is recommended to use an Open Standards product such as ZIP. There are numerous ZIP tools available, and ZIP libraries for various programming environments. ( i.e., GNU ZIP, java.util.zip, DotNetZip)
- Under the File component in the LargeFileNoun detail line, there is an element called MIMECode. Use this MIMECode element to indicate the *Content-Type* of the LargeFile. Examples of *Content-Type* are:

application/x-gzip  
 application/zip  
 image/gif  
 image/jpeg

Based on the MIMECode/*Content-Type*, the receiver of the NotifyLargeFile BOD, can identify the format of the file, and perform the appropriate function to handle the file after retrieving it.

**Note:** *MIME (Multipurpose Internet Mail Extensions) were originally defined in [RFC 2046](#) for use in e-mail sent through [SMTP](#), but their use has expanded to other protocols such as [HTTP](#), [RTP](#) and [SIP](#).*

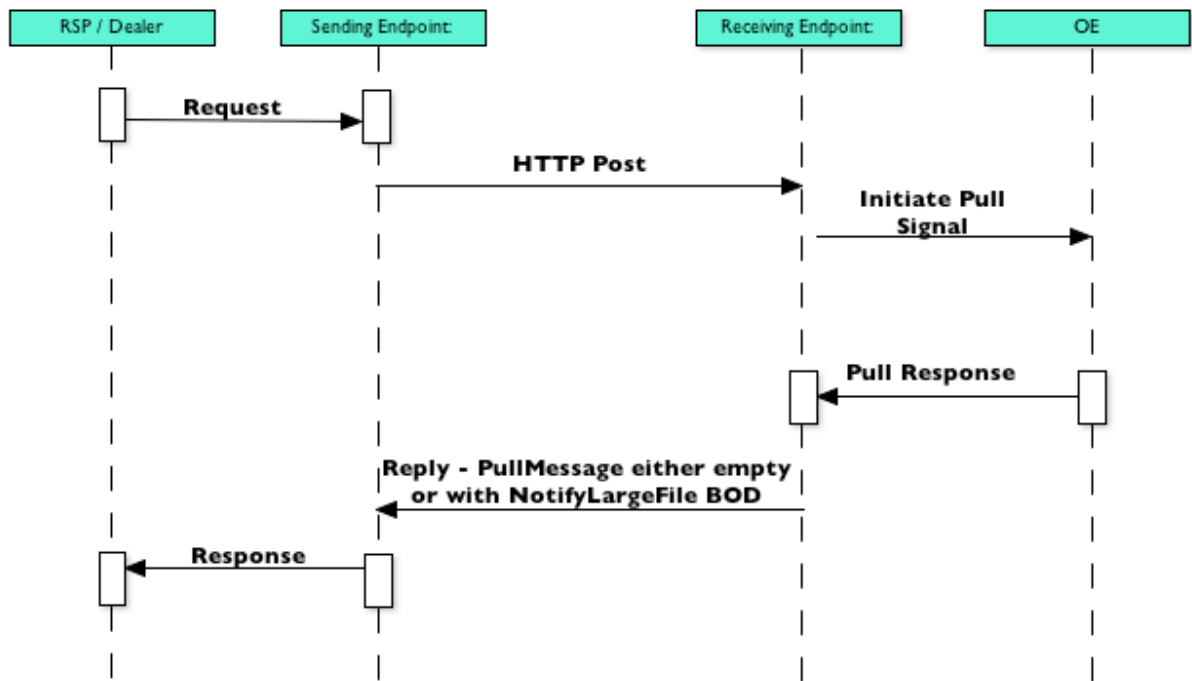
## LargeFileDetail Line

Name	Description	Occurrence	Type	Data Type	User Notes
LineID	A unique identifier for a line. i.e A line number.	0..1	Field	<a href="#">udt:IdentifierType</a>	
<a href="#">File</a>	Describes the meta data for a file.	1..1	Component	FileType	

## File Component. This component contains all the information about the large file.

Name	Description	Occurrence	Type	Data Type	User Notes
Filename	The name of a file that is to be created, stored, or retrieved	1..1	Field	<a href="#">udt:TextType</a>	
<b>MIMECode/ Content-Type</b>	The MIME application code that indicates the <i>type of content</i> of the large file. This must conform to the Internet Media Type file formats.	1..1	Field	<a href="#">udt:CodeType</a>	
FileSizeMeasure	The numeric value used to indicate a file size according to the unit code.	0..1	Field	<a href="#">sqdt:ComputerStorageMeasureType</a>	
MD5HashCode	The MD5 checksum that is used to verify the integrity of a file.	0..1	Field	<a href="#">udt:CodeType</a>	
URI		0..1	Field	<a href="#">qdt:URIType</a>	

**NotifyLargeFile BOD Operation using the STAR PullMessage Method**



**LargeFile - Out of Band Transfer using a secure protocol**  
**STAR recommends the use of sftp or ftps**

