



Spok Go® - File Upload Specifications  
Communication Groups

Version 3.0

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# Introduction

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This document is intended to be a guide to help the reader understand the Spok Go Communication Groups Upload.

## Scope

This document describes the requirements and technical specifications for the proper use of the data file upload.

## Intended Audience & Use

This document is intended for all personnel involved in the administration and support of the data file upload (specific to Communication Group data) as well as the users of the Spok Go system to which the uploaded Communication Group data will be inserted or updated. The document has the following intended uses:

- Validation of data to be loaded and understanding of the processes and requirements/business rules for the data file upload.
- Understanding by Spok's Professional Services Group (PSG) as well as the Spok Go customer regarding the technical specification and supported layout of the data file upload.
- A development specification and reference for the data file upload.

# Requirements

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The following sections will outline the various requirements for the success of the Spok Go Communication Groups File Upload.

## System Requirements

The following are system requirements.

- A comma separated file called `communicationgroupinfodataload.[CCYYMMDDHHMMSS].csv` (where `[CCYYMMDDHHMMSS]` is the date/time of the file's creation by the source system) with fields in the order that is defined later in this document.
- An SFTP client (SFTP enables file transfers over SSH) that is capable of transferring files to Spok Go's on-premises Gateway.

## Resource Requirements

The following resources will be required for implementation of the Spok Go Communication Groups File Upload:

- A Customer's Source System Data Administrator - this resource is responsible for the creation of the previously mentioned `communicationgroupinfodataload.[CCYYMMDDHHMMSS].csv` as well as for the data integrity of the file.
- Spok Professional Service Group (PSG) resource - this resource is responsible for enabling the Spok Go File Upload connector for the Customer's Spok Go system as well as for guiding the Customer through using these specifications for the creation and transfer of the Communication Groups file.

## Connection Requirements

The following are the connection parameters to the on-premise Gateway for the Spok Go Communication Group File Upload:

GATEWAY	: [FQDN or IP address of the Gateway's Load Balancer]
USERNAME	: [Auto-generated during setup, provided by PSG resource]
PASSWORD	: [Auto-generated during setup, provided by PSG resource]
PORT	: 22

## File Formatting Expectations

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Each row in the CSV file represents one Communication Group record. The v3.0 version of the Spok Go Communication Groups File Upload specifications supports a maximum of 16 fields and therefore expects 15 “,” commas to delimit the first 15 fields.

Then, instead of a “,” comma, the 17th or last field for each record should be terminated with a carriage return/line feed combo (CRLF) unless it is the last or only record in a file in which case the terminating CRLF is optional.

## Field Formatting Expectations

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The `communicationgroupinfodataload.[CCYYMMDDHHMMSS].csv` file will utilize a simple set of three characters to separate fields, sub-fields separators and repetitions within fields.

- A “,” comma is used to separate fields
- A “;” semi-colon is used to separate sub-fields within a single field
- A “|” pipe character is used to separate one-to-many repetitions of data in a single field
- A “~” tilde is used to separate sub-fields within a single **sub** field
- A “.” colon character is used to separate one-to-many repetitions of data in a single **sub** field

The use of any of these characters as actual data within any of the fields that are defined below is not supported.

## Other Considerations

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1. Pre-loaded users with external IDs
2. Pre-load On-Call groups
3. Pre-load On-Call role assignments
4. Practitioner departments (for Communication Groups that are associated to one or more departments)
5. Spok Go’s location hierarchy, including facilities (for Communication Groups that are associated to one or more facilities)

Not supported...

- Spok Go does not support the use or association of devices to a Communication Group.

## Operation Field

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This file supports two types of operations. This can be specified in column 3 (C):

- ‘FULL’ = This operation will process all supported fields in the specification.

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- 'STATUS' = This operation will only process the 'Status' field for an existing record. All other fields will be ignored. This operation looks at entities by unique ID first, if no unique ID is provided, data exchange will look up entity by name. If no record is found, an error is logged.
  - Refer to column Operation STATUS Required

## Field Mapping

The following table shows which Communication Group details can be loaded into the Spok database in the field order that follows.

Fields in this table are both numbered and lettered (ex: 5(E)) to aid in counting and referring to specific fields as well as for providing an easy cross-reference to alpha column headers if the file is viewed in a spreadsheet application.

Field	Description	Required for FULL Operation	Supports Repeats for FULL Operation	Required for STATUS Operation	Format	Spok attribute
1(A)	Targeted Spec Version	✓		✓	Expected value: 3.0	
2(B)	File Type	✓		✓	Expected value: MESSAGEGROUP	
3(C)	Operation	✓		✓	Expected value: "FULL" or "STATUS"	
4(D)	Unique ID			✓ If not available, the name will suffice in 5(E)	ExternalID	External ID
5(E)	Communication Group Name	✓			Free text, spaces allowed	Case-insensitive searches will either result in the creation of a new communication group or an update to an existing communication group using the data fields that follow.
6(F)	Location				LocationType;LocationName)	Example: Region;West Facility;Fairview Building;Urgent Care Building  Must match existing location record in Spok Go in order to be associated with a Location. The type for the Location that is being associated to the group must be configured to be an allowed entity association

Field	Description	Required for FULL Operation	Supports Repeats for FULL Operation	Required for STATUS Operation	Format	Spok attribute
7(G) LocationExternalId	A unique Id for the location in the source system if one exists.  If this field is populated, column 6(F) is not needed.				LocationId	Location External ID
8(H) Department	Practitioner department to which the communication group is associated				Department name	Must match existing department record in Spok Go in order to be associated with a communication group.
9(I) DepartmentExternalId	A unique Id for the Department in the source system if one exists				Department Id	
10(J) Group Members	Name and unique identifier for each member of the communication group		✓		staffUniqueId; lastName; firstName	A communication group member's status will be inherited from their user record's directory status.



Field	Description	Required for FULL Operation	Supports Repeats for FULL Operation	Required for STATUS Operation	Format	Spok attribute
11(K) Care Team Role(s)	The care team role(s), with required details, that may be assigned to a communication group.		✓		Care Team Role Instance Unique Identifier; LocationData; Functional Role; Care Team Role External Id  See LocationData <sup>2</sup> below	The combination of these four components are required to uniquely identify a care team role before it can be assigned to a communication group.  The assignment of a care team role to a communication group will allow messages to the group to be sent to a user who is currently assigned to the role.
12(L) On Call Groups	The on-call group, with required details, that may be assigned to a communication group		✓		On-Call Group Name; LocationData; On Call Group External Id  See LocationData <sup>2</sup> below	The combination of these three components are required to uniquely identify an on-call group before it can be assigned to a communication group.  The assignment of an on-call group to a communication group will allow messages to the group to be sent to members of the on-call group who are currently on-call
13(M) On Call Roles	The on-call role, with the required details, that may be assigned to a communication group		✓		On-Call Role Name; On-Call Group Name; LocationData; On Call Group External Id  See LocationData <sup>2</sup> below	The combination of these four components are required to uniquely identify an on-call role before it can be assigned to a communication group.  The assignment of an on-call role to a communication group will allow messages to the group to be sent to users who are currently assigned to the on-call role.
14(N) Group Visibility	Describes the preferred visibility of the communication group				"PUBLIC" or "RESTRICTED"	
15(O) Status	Sets the record's active v. inactive status	✓		✓	"ACTIVE" or "INACTIVE"	
16(P) Timestamp	Date and time the new/updated communication group	✓			CCYYMMDDHHM MSS	

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Field	Description	Required for FULL Operation	Supports Repeats for FULL Operation	Required for STATUS Operation	Format	Spok attribute
	record was written to the file					

## Data Upload Details

The following section explains field-level specifics that should help ensure the successful implementation of the Spok Go Communication Groups File Upload.

1) Note that if this file is viewed in a spreadsheet application, these fields may not display as intended due to the application's default field formatting. Changing the displayed format of these fields' columns should allow a reviewer to see the column's contents as expected.

2) LocationData : For lookup by name the data will have to be specified in this format

Ancestor1LocationType : Ancestor1LocationName ~ Ancestor2LocationType : Ancestor2LocationName ~ Ancestor3LocationType : Ancestor3LocationName  
~ LocationType : LocationName

The whole hierarchy will have to be specified. There will be 1 element for each node in the hierarchy. Each node's type and name will have to be specified. This is repeating data. So there can be any number of type:name elements. Order matters. It should traverse from the highest level to the lowest. The location id for the last element in this collection will be the one that is used to make the association or lookup the care team role or oncall role.

The ":" will be the delimiter used to separate out the type and name. "~" will be the delimiter used to separate out 1 ancestor from the other

## Integration Risks

The following are possible risks that have been identified:

- Non-curated source data with duplicates or inaccurate data.
- Irregular or inconsistent output of files from source system.
- Poorly formatted CSV files
- Inclusion of incorrect data that cannot be corrected by subsequent Communication Group file uploads (ex: incorrect users/members of the Communication Group)

## Integration Success Criteria

The integration will be considered successful if the following criteria are met:

- The Spok Go Communication Groups File Upload is implemented per the specifications in this document and Communication Groups and their Members have been added to Spok Go as expected.

## Revision History

The table that follows will provide a history of changes that are made to this document.

Date	Comment(s)	Author
2020.05.26	Initial v1.0 of these specs	Todd Thomas
2020.07.21	Updated department info to indicate that a Communication Group is only associated to one department at a time.	Todd Thomas
2020.08.05	Added field for adding a Care Team Role to a Communication Group	Todd Thomas
2020.08.10	Changed expected file name from "messagegroupdataload" to "communicationgroupinfodataload"	Todd Thomas
2020.11.10	Added field to represent external ID's from Spok consoles or other third party systems. Removed requirement for producer code from Group Members field.	Zach Hanson
2020.11.18	Correct External ID 3( c) description Support for Group Visibility 10(J)	Paola Gonzalez
2020.11.24	Added "Operation" field to indicate a full update or a status update on the entity. Added missing "Record Status" field. Changed version to 2.0 to be in synch with other import specifications.	Zach Hanson
2020.12.4	Added fields to support On-Call Groups and On-Call Roles within Communication Groups	Zach Hanson
2020.12.9	Added additional explanation on 'Operation' functionality and new column for 'Operation Status Required'.	Paola Gonzalez
2021.1.26	Add revision 2.1 to support associations using external ids.	Sunil Bhujle
2021.9.20	Updated to version 3.0 of the spec to support flexible location associations	Zach Hanson











