ScriptRunner's issueFunction not available to all users?

I recently encountered a Jira instance with ScriptRunner installed, where there **issueFunction** custom field provided by ScriptRunner was not available to all users. The error was Field 'issueFunction' does not exist or you do not have permission to view it.:

Search	Save as					层 Email	🗄 Edi	t
SissueFund	tion in epicsOf()					?	Search	Basic
Field 'issue	Function' does not ex	tist or you do no	ot have pe	mission to	o view it.			
This happened for so	me users, but not all.							
	g to the Custom Fields a which not all users had a		custom fields	s'), searchin	g for issueFunctio	on revealed that it v	vas scoped to j	ust one
Custom field	s					Optimize	Add custo	m field
	your issues to define custom fields and con s. Q		're displaye		users. Here you ca			
Name			Туре		Available Context	s Screens	Actio	ns
issueFunction Field created by scri	LOCKED pt runner plugin for adva	nced issue fun	JQL Fund	:tions	1 project	0 screens	0	~
Configure Custo	m Field: issueFunc	tion LOCKED						?
	om Field Configuration s nfigure a custom field d							ll over-
• View Custom Fiel	ds							
Default Configu	uration Scheme for	issueFunction	n					

Default configuration scheme generated by JIRA

Applicable contexts for scheme: Issue type(s):

Global (all issues) Project(s): Administration

How did this field get scoped like this? I don't know.

How do we fix it? The field is 'locked', so the configuration scheme cannot be edited.

Time for a bit of database spelunking.

Here we see our custom field:

	comfield where cfname='issueFunction';
-[RECORD 1]	10900
customfieldtvpekev	com.onresolve.jira.groovv.groovvrunner:jglFunctionsCustomField

customfieldtypekey	com.onresolve.jira.groovy.groovyrunner:jqlFunctionsCustomFieldType
customfieldsearcherkey	com.onresolve.jira.groovy.groovyrunner:jqlFunctionsSearcher
cfname	issueFunction
description	Field created by script runner plugin for advanced issue functions. Do not place on any screen.
defaultvalue	NUL
fieldtype	NUL
project	NUL
issuetype	NUL
cfkey	NUL

Custom fields can be scoped to a set of projects, and also scoped to a set of issue types. There are two sets of tables achieving this:

	Table 1 (joined to customfield)	Table 2 (joined to table 1)
Per-project scoping	fieldconfiguration	configurationcontext
Per issue type scoping	fieldconfigscheme	fieldconfigschemeissuetype

For our issueFunction field here are the tables:

Per-project tables

jira=> se	elect * from field	configurat	ion where field	did='c	ustomfield_10900';			
id	configname			description			fieldid	customfield
11000	Default Configuration for issueFunction			Default configuration generated by Jira			customfield_10900	NUL
(1 row)								
Time: 0.4 jira=> se	419 ms elect * from config	gurationco	ntext where fie	eldcon	figscheme=11000;			
id	projectcategory	project	customfie	ld	fieldconfigscheme			
13610	NUL	10600	customfield_1	10900	11000			
(1.50.1)								

(1 row)

Here we see, as expected, that issueFunction is scoped to one project with ID 10600. There would be more than one configurationcontext table if more projects were selected.

Per-issuetype tables

jira=> so	elect * from	fieldconfigscheme w	here fieldid='cus	comfield_10900';		
id	configname			description	fieldid	customfield
11000	0 Default Configuration Scheme for issueFunction			Default configuration scheme generated by JIRA	customfield_10900	NUL
(1 row)						
Time: 0.4 jira=> se		fieldconfigschemeis	suetype where fie	.dconfigscheme=11000;		
id	issuetype	fieldconfigscheme	fieldconfigurat	on		
13710	NUL	NUL 11000 11000				
(1 гоw)						

As issueFunction is not scoped per issue type (issuetype is null).

Fixing our field scoping

The fix is quite simple: in configurationcontext we want to change that project ID (10600) to null.

You can do this via update configurationcontext set project=null where id=...; but here is SQL that is a bit safer:

update configurationcontext set project=null where customfield='customfield_' || (select id from customfield where cfname='issueFunction' and customfieldtypekey='com.onresolve.jira.groovy.groovyrunner: jqlFunctionsCustomFieldType') and project is not null;

Normally you would need to restart Jira to pick up this change, but thanks to ScriptRunner's ever-useful Clear Groovy classloader or Jira internal caches built-in script we don't have to:

	unner					Settings	
Browse [®] Console	Built-in Scripts Jobs	Listeners	Fields	Behaviours	Workflows	More	~
Clear Groovy c	lassloader or Jir	a internal	cache	25			
	rnal caches (if this is no abase. Expect a delay a			illy), or the Jir	a caches if you	ı have cha	ange
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After this, all users should be able to run JQL involving $\tt issueFunction$.