ArcGIS Pro Add-in 1.0

Goal: Goal of the project is to make a GlobeSpotter integration in ArcGISPro
From: Harm Bruinsma
Date: 20-09-2016

Participants

The table below lists all Participants. Communicate updates of this document to all Participants, at least once per 2 weeks and at least by email.

Role	Name	Short name	Estimated hours	Remarks
Customer [1]	Marcel de Vries	MdV		
Team Lead [1]	Harro Jacobs	HJa		
Cluster Lead [1]	Sjoerd Brandsma	SBr		
Project Lead [1]	Harm Bruinsma	HBr		
Architect	Harm Bruinsma	HBr		
Developer [1]	Harm Bruinsma	HBr		
Observer	Sjoerd Brandsma, Hans van Eijk Tony Verlaan Bart Beers	SBr, HvE, TvE BBe		

Versions

Version	Date	Author	Remarks
1	09/07/2015	Harm Bruinsma	Initial version
2	15/07/2015	Harm Bruinsma	Updated version
3	21/09/2015	Harm Bruinsma	Updated version
4	06/10/2015	Harm Bruinsma	Updated version
5	20/11/2015	Harm Bruinsma	Updated version
6	21/12/2015	Harm Bruinsma	Updated planning
7	18/01/2015	Harm Bruinsma	Updated planning
8	04/03/2016	Harm Bruinsma	Updated planning
9	15/04/2016	Harm Bruinsma	Updated planning
10	09/;05/2016	Harm Bruinsma	Updated planning
11	30/05/2016	Harm Bruinsma	Updated planning
12	28/06/2016	Harm Bruinsma	Updated planning
13	19/07/2016	Harm Bruinsma	Updated planning
14	20/09/2016	Harm Bruinsma	Updated planning

Planning of phases and deliverables

ID	Phases or deliverable	Wk / Mo	27 29-6	28 6-7	29 13-7	30 20-7	31 27-7	32 3-8	33 10-8	34 17-8	35 24-8	36 31-8	37 7-9	38 14-9	39 21-9	40 28-10	41 5-11	42 12-11	43 19-11
1	Agreed phase 1 (scope, requirements and planning)																		
2	Agreed phase 2 (solution approach and test plan)																		
3	All (development) activities bundled in a breakdown of agreed deliverables																		
3a	Create a basic framework																		
3b	Implement the recent cyclorama layer functionality.																		

ID	Phases or deliverable	Wk / Mo	44 26-11	45 2-11	46 9-11	47 16-11	48 23-11	49 30-11	50 7-12	51 14-12	52 21-12	53 1-12	1 04-1	2 11-1	3 18-1	4 25-1	5 02-2	6 08-12	7 15-2
3b	Implement the recent cyclorama layer functionality.																		
3c	Implement the historical cyclorama layer functionality, include the historical slider.																		
3d	Implement the GlobeSpotter window																		
3e	Implement the viewing cone																		

ID	Phases or deliverable	Wk / Mo	8 22-2	9 29-2	10 07-3	11 14-3	12 21-3	13 28-3	14 04-4	15 11-4	16 18-4	17 25-4	18 2-5	19 9-5	20 16-5	21 23-5	22 30-5	23 6-6	24 13-6
3c	Implement the historical cyclorama layer functionality, include the historical slider.																		
3d	Implement the GlobeSpotter window																		
3f	Implement the Agreement window																		
3g	Implement the cyclorama search functionality																		
3h	Implement the vector layer functionality																		
3i	Implement the measuring functionality																		

ID	Phases or deliverable	Wk / Mo	25 20-6	26 27-6	27 4-7	28 11-7	29 18-7	30 25-7	31 1-8	32 8-8	33 15-8	34 22-8	35 29-8	36 5-9	37 12-9	38 19-9	39 26-9	40 3-10	41 10-10
3g	Implement the cyclorama search functionality																		
3i	Implement the measuring functionality																		
3j	Add a help button with help information																		
3k	Make an installation manual																		
4	Formal test that all requirements are met																		
5	Documentation updated																		
6	Documentation review & Code review																		
7	Release <Record release date>														21/9				
8	Formal handover to the customer that the Project is completed including a filled project satisfaction survey[1] <Record handover date>														21/9				

Action points

Id	Action	Owner	Status[I]	Remarks
1	Install ArcGIS Pro 1.1 and the ArcGIS Pro SDK	HBr	Done	
2	Investigate how to use Add-Ins in ArcGIS Pro	HBr	Done	
3	Investigate how to use flash in ArcGIS Pro	HBr	Done	We use flash now, but in the next version, we will use HTML 5.
4	Investigate how to use property property pages in ArcGIS Pro	HBr	Done	The need to use property pages for the GlobeSpotter settings form
5	Investigate how we can take over the styling of text in ArcGIS Pro	HBr	Done	
6	Investigate how the styling of objects of the map is working in ArcGIS Pro	HBr	Done	
7	Investigate how we can draw and update feature layers on the map in ArcGIS Pro	HBr	Done	
8	Investigate how we can draw static objects on the map in ArcGIS Pro	HBr	Done	
9	Investigate how measurement is working in ArcGIS Pro and how we can use it	HBr	Done	
10	Create a Git repository for the GlobeSpotter for ArcGISPro integration code	HBr	Done	
11	Test the recent cyclorama layer functionality	HBr	Done	
12	Test the historical cyclorama layer functionality	HBr	Done	
13	Test the GlobeSpotter functionality	HBr	Done	
14	Test the vector layer overlay functionality	HBr	Done	
15	Test the cyclorama search functionality	HBr	Done	
16	Test the measurement functionality	HBr	Done	
17	Test the local installation	JKe		
18	Formally hand over GlobeSpotter for ArcGISPro release	HBr	Done	

[I] Open / Pending / Done / Cancelled

Scope, requirements and Planning

Id	Actor	Feature	Purpose	Comment	Priority
1	As a user	I would like to set the login info once (username and password)	The user should not have to log in each time.		M
2	As a user	I would like to use different coordinate systems around the world	The add-in must be able to be used anywhere in the world.		M
3	As a user	The coordinate systems for the map and the cyclorama doesn't need to be the same	The add-in must be flexible in the use of coordinate systems.		M
4	As a user	The max cyclorama viewers which have to be open at the same time can be set manual and the maximum number of cyclorama viewers which can be opened at the same time is 4	Flexible use of the number of cyclorama viewers.		M
5	As a user	I would like to see point, line and surface vector data overlays in the cyclorama	The add-in must support overlays.		M
6	As a user	I would like to use styling for point, line and surface overlay data	ArcGIS pro supports also styling.	Styling is optional	C
7	As a user	I would like to be able to switch the vector layers in the cyclorama on and off	The visibility of the layers on the map and the cyclorama have to work independently of each other.		M
8	As a user	The maximum distance where you see a vector layer in the cyclorama is a setting that you can turn on and off. The default distance is 30 meters	Otherwise, the vector layers are too cluttered in the cyclorama, and the add-in is too slow.		M
9	As a user	I would like to see the identity information of a vector layer if I click on the vector layer in the cyclorama	If you click on the map you can see the vector information, so if you click on the cyclorama you must also see the vector information.		M
10	As a user	I would like to see detail images in the cyclorama	Some users of the add-in are also customers of detail images.		S
11	As a user	I would like to see on the map if a recording contains detail images	Some users of the add-in are also customers of detail images.		S
12	As a user	I would like to make a local installation	Some users use local storage.		M
13	As a user	I would like to use a proxy server	Some users use a proxy server.		M
14	As a user	I would like to see about information	To inform the user about the GlobeSpotter Add-in.		M
15	As a user	I would like to see the agreement information, when I log in for the first time	To inform the user about the Agreement.		M
16	As a user	I would like to see the agreement information all the time I want	To inform the user about the agreement.		M
17	As a user	If I reach a zoom level of 1:2000, I would like to see recordings	If you see a dot recording at high zoom level, then it will be		M

			too cluttered.		
18	As a user	I would like to turn the recording layer on the map on and off	The visibility of the recording layers on the map and the cyclorama have to work independently of each other.		M
19	As a user	I would like to turn the recording layer in the cyclorama on and off	The visibility of the layers on the map and the cyclorama have to work independently of each other.		M
20	As a user	I would like to see the historical recordings	Historical recordings is also a feature of the ArcGIS Desktop add-in.		M
21	As a user	I would like to set the date range of the historical recordings	Historical recordings is also a feature of the ArcGIS Desktop add-in.		M
22	As a user	If I don't have access rights to a cyclorama, I would like to see that on the map	A user may be informed that he should not have access to an image.		S
23	As a user	If I click on a recording, I would like to see the image	This is standard functionality of the ArcGIS Desktop add-in and GlobeSpotter.		M
24	As a user	If I open an image, I would like to see a viewing cone. The viewing cone is in the viewing direction.	This is standard functionality of the ArcGIS Desktop add-in and GlobeSpotter.		M
25	As a user	I would like to search for an image with an imageId.	Then it is easier to find an image.		S
26	As a user	I would like to make a point measurement	Measurements is also a standard feature of the ArcGIS Desktop add-in.		M
27	As a user	I would like to make a line measurement	Measurements is also a standard feature of the ArcGIS Desktop add-in.		M
28	As a user	I would like to make a surface measurement	Measurements is also a standard feature of the ArcGIS Desktop add-in.		M
29	As a user	I would like to make a volume measurement	Volume measurement is also a functionality of GlobeSpotter.	Volume measurement is optional.	C
30	As a user	I would like to update observation points in a measurement	Measurements is also a standard feature of the ArcGIS Desktop add-in.		M
31	As a user	I would like to remove a measurement	Measurements is also a standard feature of the ArcGIS Desktop add-in.		M
32	As a user	I would like to remove observation points in a measurement	Measurement is also a standard feature of the ArcGIS Desktop add-in.		M
33	As a user	I would like to make a smart-click measurement	Measurement is also a standard feature of the ArcGIS Desktop add-in.		M
34	As a user	I would like to see the help information	Help information is also a standard feature of the ArcGIS		M

			Desktop add-in.		
35	As a user	I would like to use both feet and meters	This functionality is for use in the United States.		M
36	As a user	I would like to make a report	This is also functionality GlobeSpotter.	Create a report is optional	W

*MoSCoW is used to define Priority to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement.

(M)UST Describes a requirement that must be satisfied in the final solution for the solution to be considered a success.

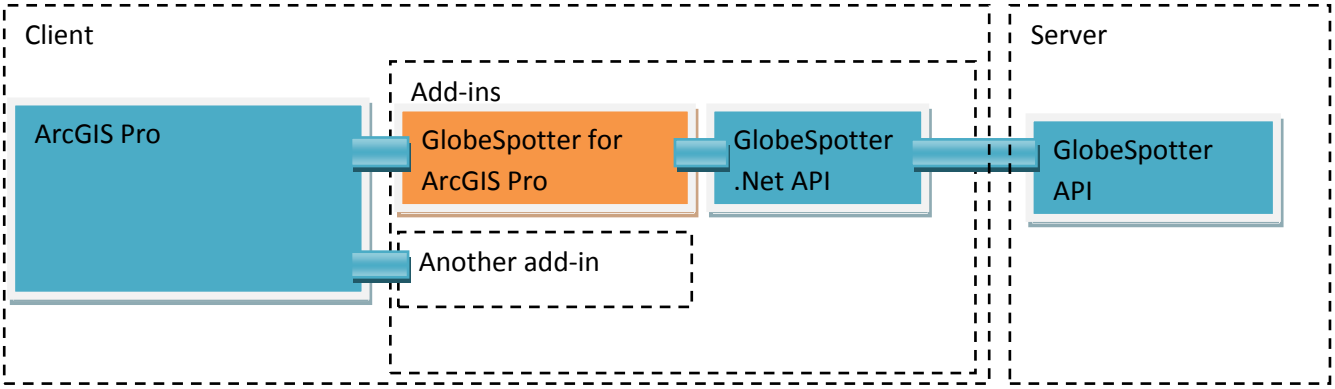
(S)HOULD Represents a high-priority item that should be included in the solution if it is possible. This is often a critical requirement but one which can be satisfied in other ways if strictly necessary.

(C)OULD Describes a requirement which is considered desirable but not necessary. This will be included if time and resources permit.

(W)ould or Won't Represents a requirement that stakeholders have agreed will not be implemented in a given release, but may be considered for the future>

Solution approach

GlobeSpotter for ArcGIS Pro is an Add-in in ArcGIS pro. The following figure shows a schematic representation. The orange box is the part that is made in this project.



Test approach

The way the GlobeSpotter for ArcGIS desktop Add-In will be tested:

- Automatic testing: we use an automatic testing tool: Sikuli.
- The customer (Marcel de Vries) must make time for functional testing.
- In a later stage. We may ask external customers to test a beta version of the add-in.

Test results

This was the test process:

- During the project, every time a piece of functionality was finished, the functionality was tested by Marcel de Vries.
- A number of customers have been tested at the end of the project.
- The customer feedback is used to make the product more stable.

Communication

Standard R&D project communication:

Marcel de Vries is the customer, and with him I occasionally discuss the progress of the project. This consultation takes just occasionally place behind the computer.

Communicate updates of this document to all Participants and at least once per two weeks by email.
This email have a short review of the last two weeks and the planning of the work for the coming two weeks.

Evaluation results

<Fill the satisfaction survey results "v" and improvement proposals as proposed>

Accomplished goals

In your opinion are the project goals achieved?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Sustainability of project goals

In your opinion did the project goals change during the project?

Not	☐
Very few	☐
Few	☐
Some	☐
Many	☐

Time scales

In your opinion are the deliverables met within the set deadlines?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Time scales

In your opinion were the deadlines of the deliverables realistic?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Communication

In your opinion are you sufficiently informed of the project progress?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Communication

In your opinion did you get sufficient feedback from the customer(s) of the project?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Test results

In your opinion are the project results sufficiently tested to decrease project risks?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Test results

In your opinion were the project participants sufficiently involved in the functional testing of the project?

Entirely	☐
Mostly	☐
Partially	☐
Limited	☐
Not	☐

Suggestions for improvement

Suggestions for improvement