

MERU WIRELESS DESKTOP DESIGN SERVICE

“Heat Map Service”

1. INTRODUCTION

The desktop survey or heatmap is a key part of the sales process of a wireless network providing a good estimation of the equipment required to address the customer's design criteria, at the minimum cost.

In some circumstances a heatmap is sufficient for installation planning in others it should be used in conjunction with a full site survey.

There are three parts to the heatmap process:

- Agree and Document the functional specification.
- Create the heatmap
- Provide desktop survey documentation.

a) Agree and Document the functional specification.

The network must meet the requirements of the organization that commissions it, however that organization may not have the expertise to specify technically what it requires, in a practical manner. Siracom helps produce a specification document that identifies the commissioning organization's requirements and provides a quantitative delivery specification. The specification will include:

- Areas to be covered by wi-fi
- Minimum connection speed to be achieved in each area to be covered
- Expected user densities in each area to be covered
- Applications to be delivered and service levels to be achieved in each area to be covered
- Frequency bands to be supported
- Standards to be supported
- Resilience expectations
- Aesthetics (access point type and location)

b) Produce the heatmap

Meru EZRF coverage planner is used to simulate the physical properties of the areas to be covered by Wi-Fi and produce an RF design. The RF design enables system designs and quotations to be produced. We take a scale plan of the building, add walls and other features, specify the RF characteristics of the walls, then use an iterative process of positioning and simulation to arrive at access point locations which meet the specification. These designs are estimations, are more accurate with accurate input, and in many circumstances are adequate for final design.

c) Document the site survey results

A document will be produced containing the following sections:

- Functional Specification
- Heatmap showing access point locations and expected coverage
- Equipment list and quotation if required

2. PRE-SURVEY QUESTIONNAIRE

Background Information

Reseller		End User	
Reseller Contact		Vertical Market	(ie primary school, warehouse)
Phone Number		Contact	
Email Address		Address	
Survey date			
Doc due date			
		Phone Number	
		Email Address	

Siracom will need the following items before we can begin:

Customer to provide details of	Siracom Tasks
A building plan as a PDF, GIF or JPEG to scale.	Import to EZRF coverage planner
A description of the internal and external wall types	Add to plan
A description of aesthetic requirements	Select AP type and location ie wall mount, ceiling mount, above ceiling mount. Note any special antenna requirements
A description of any "special" environments or requirements	Warehouses, outdoor coverage, auditorium etc.

We will agree the following during a phone call:

Customer to provide details of	Siracom Tasks
Coverage User density details Areas of very high user density (50+) Areas of high user density (25+) Areas to be covered with 2.4GHz Areas to be covered 5GHz Areas where coverage is not required	mark up plan add APs required for performance reasons
Describe standards to be supported (802.11a,b,g,n)	Add radio spec
Describe AP resilience required	Produce AP resilience coverage plans
Describe the controller resilience required	

3. NOTES

The heatmap is a simulation, and its accuracy cannot be guaranteed. The greater the accuracy of the information provided in the pre-survey questionnaire, the greater the accuracy of the result.

We try to make our surveys accurate and “Fit for purpose” but do not accept liability should changes to the specification be required.