

ThingSpace Manage

Case Study





About the Project

ThingSpace Manage (TSM) is an online self-service portal where customers can track, monitor, provision and control the use of their IoT/M2M devices.

They can provision devices (activate, deactivate, suspend, and resume service), monitor usage, track devices, troubleshoot connectivity, configure alerts, purchase SIMs, and much more.



ThingSpace data

39.7M

Managed IoT
Connections

\$318M

Yearly Revenue
Generated



20

Customers
Interviewed



My Role

The entire user experience was redesigned to provide users with a stylish, modern look and feel.

Beyond the new design, We wanted to take a outside-in-approah: forming relationships with customers to understand their goals, motivation and behavior.



Research



Architecture



UX/UI



Prototyping



User testing



Research process

We involved real users in our design process to ensure the products we built meet their diverse use cases and needs



Boosts overall revenue and conversion rates



Reduces risk of building the wrong things



Increases customer satisfaction



Research methods

Problem Validation

Provides a well understood, clearly articulated customer problem including its context and the people involved.



Contextual inquiry



In-depth interviews with internal stakeholders



In-depth interviews with potential users



Customer surveys

Solution Validation

Determines if the product/feature/design solves the intended customer problem.



Card Sorting



Usability Testing



Design Studio Workshop



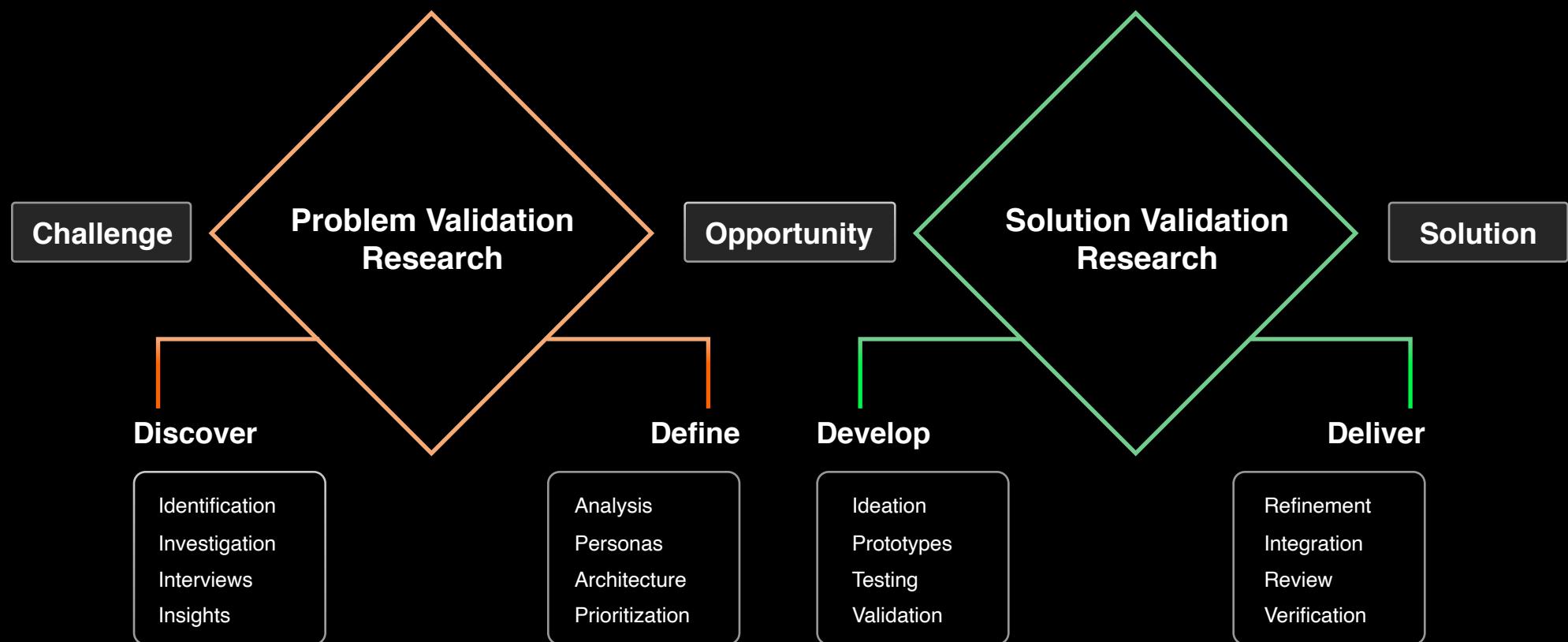
First click testing



Tree Testing



The approach



User Personas



Company

What industry is your company in?

What size is your company?

Goals

What are you responsible for?

What does it mean to be successful in your role?

Role

What is your job role?

What is your title?

What is your salary range?

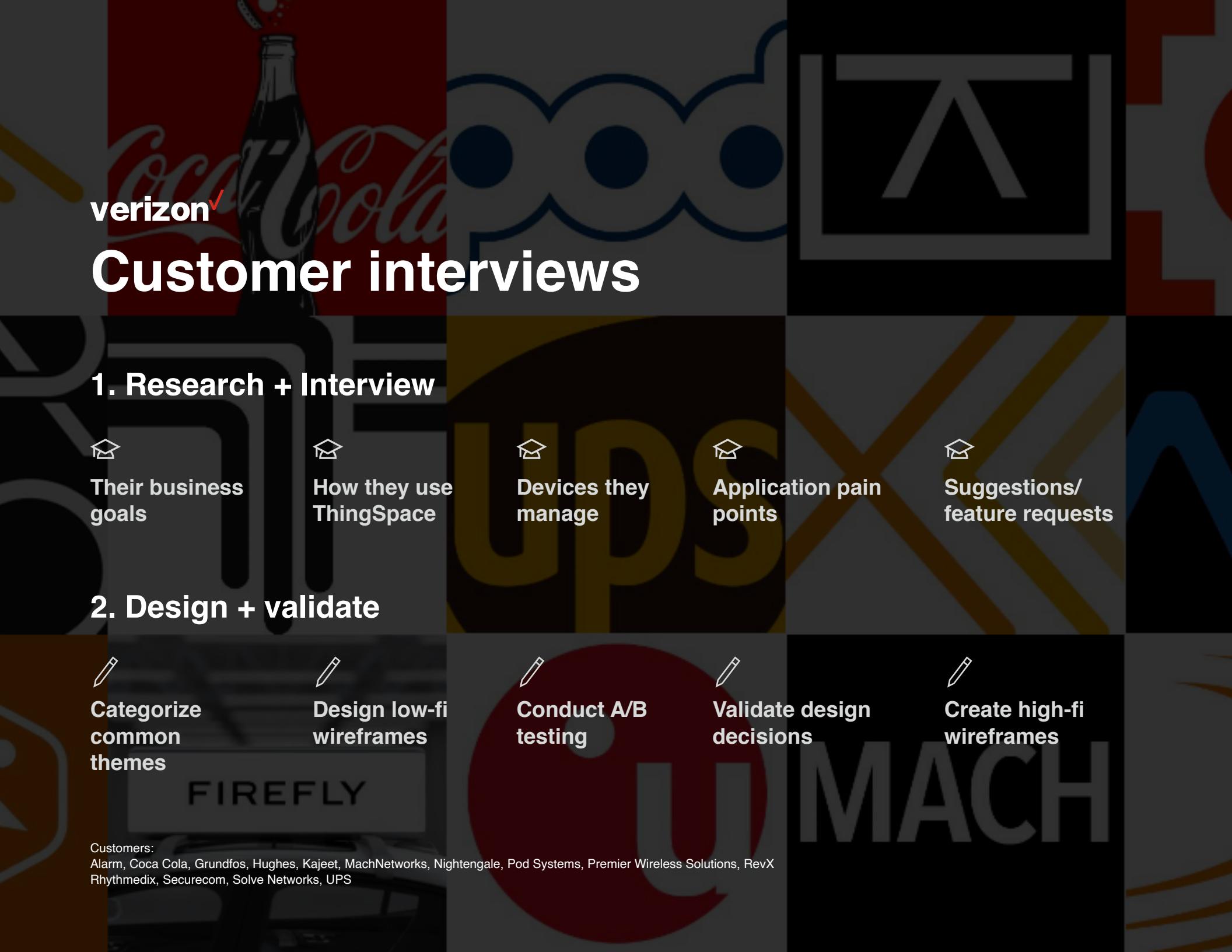
How is your job role measured?

Describe a typical day in your role.

What skills are required.

Challenges

What are biggest challenges?



verizon[✓]

Customer interviews

1. Research + Interview



Their business goals



How they use ThingSpace



Devices they manage



Application pain points



Suggestions/ feature requests

2. Design + validate



Categorize common themes



Design low-fi wireframes



Conduct A/B testing



Validate design decisions



Create high-fi wireframes

Customers:

Alarm, Coca Cola, Grundfos, Hughes, Kajeet, MachNetworks, Nightengale, Pod Systems, Premier Wireless Solutions, RevX, Rhythmedix, Securecom, Solve Networks, UPS



How we captured feedback

Recorded current customer feedback sessions on-site or via conference

- Learned about their business
- Identified pain points
- Got a clear understanding about their use case
- Observed competitor platforms
- Observed and screen recorded application users login and use ThingSpace



Pain points



Too many systems to monitor and manage devices.



Want better use of screen real estate more focus on devices



Need faster page load, task completion and report time



More transparency when there are errors or inconsistencies.



Need more granular details of devices usage, connections and drops



Customer feedback

How to gather insights into customers' behaviors, motivations, and goals to inform and strengthen product decisions.

I go to people I trust to learn			Data-filter & more date	Simpler billing process			
Be approachable & empathetic	No Contract	Make it fast, easy, & customizable	APIs/ location APIs/ geography	Grow with me payment	Self-serve diagnostics		Create a virtual community
Show me other use cases	Transparency and flexibility in pricing	Send me a free sample during discussion	Health status visibility macro/micro view	Only pay for what is used auto-rebalancing	Send alerts		Verizon partnership to assist in service, testing, and advertising
Learn	Buy	Get	Use	Pay	Support		Stay



What we learned



Customer involvement and feedback make our products better



Incorporate validation session design concepts into the application



Better understand the learn path - more robust search through user testing.



Design, prototype and validate with current and potential customers



Customers need to understand why Verizon IoT cellular connectivity is valuable to their business.

The image shows a wireframe of a Verizon ThingSpace Manage interface. At the top, there are four user needs represented by black boxes with white text:

- "Need faster page load."
- "Need better screen real estate."
- "Need better reporting tools."
- "Need self-serve support."

The interface includes the Verizon logo, a navigation bar with links like Manage Account, Support, and various administrative tabs, and a main dashboard section titled "Devices" showing statistics for All devices (302), Active (267), Active (1), Active (264), Deactivated (31), and Suspended (2). Below this is a search bar and an "Advanced" filter button. The main content area displays a table of 302 devices with columns for Device ID, Device group, Device status, Account, Activation date, Connected, and Last connection date. The table includes a header with sorting and filtering options. At the bottom, four additional user needs are listed:

- "Needs to be easier to manage devices."
- "Needs more usage details."
- "Needs accurate real-time usage."
- "Needs to have updated branding."

SAMPLE TABLE

verizon[®] thingspace beta

Manage > Devices

Devices

302 Results

Filter ▾

<input type="checkbox"/>	Device identifier	MDN/MSISDN	IP address	Device status	Connection status	Device group	Service plan
<input type="checkbox"/>	990005878714485	15237082721	100.125.0.51	● Active	(<i>•</i>) Disconnected	TCM5201	M2M5MBSHR
<input type="checkbox"/>	A100001574B99A	7326908207	100.125.0.18	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M5MBSHR
<input type="checkbox"/>	357812090011674	17326900803	100.125.0.16	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M25MBSHR
<input type="checkbox"/>	990005779825737	17326900107	100.125.0.13	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M25MBSHR
<input type="checkbox"/>	A000003088DEFA	7326900475	100.125.0.15	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M5MBSHR
<input type="checkbox"/>	A000003088DEF8	7322898180	100.125.0.4	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M5MBSHR
<input type="checkbox"/>	357812090011898			● Deactive	(<i>•</i>) Disconnected	ConnectedDevices_0108	
<input type="checkbox"/>	A100001574B98E	7324842859	100.125.0.54	● Active	(<i>•</i>) Disconnected	Default: 0242078689-00001	M2M25MBSHR
<input type="checkbox"/>	A100001574B99B	7324842816	100.125.0.17	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M5MBSHR
<input type="checkbox"/>	357812090011872	15004350960	100.125.0.8	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M25MBSHR
<input type="checkbox"/>	A100001574B993	7324842178	100.125.0.9	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M25MBSHR
<input type="checkbox"/>	359692051248293	17322895622	100.125.0.49	● Active	(<i>•</i>) Disconnected	ConnectedDevices_0108	M2M5MBSHR
<input type="checkbox"/>	A100002175A98E	7322891805	100.125.0.36	● Active	(<i>•</i>) Disconnected	Default: 0242078689-00001	M2M5MBSHR
<input type="checkbox"/>	A100001574B991	2017873987	100.125.0.10	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M5MBSHR
<input type="checkbox"/>	352753090036441	16192079933	100.125.0.3	● Active	(<i>•</i>) Disconnected	DanielliangTCM5221	M2M5GB
<input type="checkbox"/>	357812090011666	17322891529	100.125.0.19	● Active	(<i>•</i>) Disconnected	QAAutomation	M2M25MBSHR
<input type="checkbox"/>	357812090011625	12017878289	100.125.0.2	● Active	(<i>•</i>) Disconnected	Default: 0242078689-00001	M2M25MBSHR

Show per page

1 2 3 4 >

Result

Customization

The image displays three side-by-side screenshots of the Verizon thingspace beta web interface, showing different sections of the platform.

- Left Screenshot:** Shows the "Devices" section with a search bar and a list of devices. The list includes columns for Device identifier, Provisioning, Data usage, and Account. A "Save view" and "Apply view" button are at the bottom.
- Middle Screenshot:** Shows the "Devices" section with a search bar and a list of devices. The list includes columns for Device identifier, Provisioning, Data usage, and Account. A "Save view" and "Apply view" button are at the bottom.
- Right Screenshot:** Shows the "Edit saved view" dialog box. It lists various filters and their current status (e.g., "All columns (Default)", "Pending", "Connected", "Suspended"). Buttons for "Set as default", "Edit", and "Delete" are at the bottom.

Table view

verizon® thingspace beta

Devices

26,492 Results

View: All columns

Search Bulk search Filters

Device identifier ICCID Connection Provisioning Data usage Account

89310410106543789301	89310410106543789301	Connected	Active	51 KB	0242078689
89148000003637519161	89148000003637519161	Connected	Pending	183.5 MB	0242078689
8991101200003204514	8991101200003204514	Disconnected	Suspended	1.24 MB	0242078689
899110120000320451	899110120000320451	Disconnected	Deactivated	291.54 MB	0242078689
899110120000320451	899110120000320451	Connected	Active	1.21 MB	0242078689
89148000003637519161	89148000003637519161	Connected	Active	15.57 MB	0242078689
89310410106543789301	89310410106543789301	Connected	Active	1.84 GB	0242078689
899110120000320451	899110120000320451	Disconnected	Suspended	45 KB	0242078689
89148000003637519161	89148000003637519161	Connected	Pending	913 KB	0242078689
89310410106543789301	89310410106543789301	Connected	Active	51 KB	0242078689
89148000003637519161	89148000003637519161	Disconnected	Deactivated	183.5 MB	0242078689
8991101200003204514	8991101200003204514	Connected	Active	1.24 MB	0242078689
89148000003637519161	89148000003637519161	Connected	Pending	291.54 MB	0242078689
899110120000320451	899110120000320451	Disconnected	Suspended	45 KB	0242078689
89310410106543789301	89310410106543789301	Connected	Active	1.21 MB	0242078689
89148000003637519161	89148000003637519161	Connected	Active	15.57 MB	0242078689
8991101200003204514	8991101200003204514	Connected	Active	1.84 GB	0242078689
899110120000320451	899110120000320451	Disconnected	Suspended	45 KB	0242078689
8991101200003204514	8991101200003204514	Connected	Active	913 KB	0242078689
89148000003637519161	89148000003637519161	Connected	Active	45 KB	0242078689
89310410106543789301	89310410106543789301	Connected	Active	913 KB	0242078689

Show 20 per page

Previous 1 2 3 ... 2 Next 1

About us Privacy policy Terms and conditions Help © 2020 Verizon

verizon® thingspace beta

Devices

26,492 Results

View: All columns

Search Bulk search Filters

Device identifier ICCID Connection Provisioning

89310410106543789301	89310410106543789301	Connected	Active
89148000003637519161	89148000003637519161	Connected	Pending
8991101200003204514	8991101200003204514	Disconnected	Suspended
899110120000320451	899110120000320451	Disconnected	Deactivated
899110120000320451	899110120000320451	Connected	Active
89148000003637519161	89148000003637519161	Connected	Active
89310410106543789301	89310410106543789301	Connected	Active
89148000003637519161	89148000003637519161	Connected	Pending
8991101200003204514	8991101200003204514	Connected	Active
899110120000320451	899110120000320451	Disconnected	Suspended
8991101200003204514	8991101200003204514	Connected	Active
89148000003637519161	89148000003637519161	Connected	Pending
89310410106543789301	89310410106543789301	Connected	Active
89148000003637519161	89148000003637519161	Connected	Active
8991101200003204514	8991101200003204514	Connected	Active
899110120000320451	899110120000320451	Disconnected	Suspended
8991101200003204514	8991101200003204514	Connected	Active
89148000003637519161	89148000003637519161	Connected	Pending
89310410106543789301	89310410106543789301	Connected	Active

Show 20 per page

Previous 1 2 3 ... 2 Next 1

About us Privacy policy Terms and conditions Help © 2020 Verizon

verizon® thingspace beta

Devices

10 Results

View: Sim Secure

Search Bulk search Filters

Device identifier ICCID MDN License status (Sim-Secure) Provisioning (Sim-Secure)

89310410106543789301	89310410106543789301	8178291111	Assigned Lifetime	Active
89148000003637519161	89148000003637519161	8178273333	Unassigned	Deprovisioned
8991101200003204514	8991101200003204514	TBA	N/A	Active
899110120000320451	899110120000320451	899110120000399999	Unassigned	Deprovisioned
8991101200003204514	8991101200003204514	899110120000378778	Assigned	Flexible
89148000003637519161	89148000003637519161	899110120000321245	Assigned	Provisioning pend.
89310410106543789301	89310410106543789301	899110120000388888	Assigned Lifetime	Active
899110120000320451	899110120000320451	899110120000377777	Assigned	Active
8991101200003204514	8991101200003204514	899110120000321221	Unassigned	Deprovisioned
89310410106543789301	89310410106543789301	899110120000321111	Assigned Lifetime	Active

Show 20 per page

Previous 1 2 3 ... 2 Next 1

About us Privacy policy Terms and conditions Help © 2020 Verizon

Filter

Filter by account

Create templates

Schedule reports

