velocity
by Atlona
Application Programming Interface
# Version Information

<table>
<thead>
<tr>
<th>Version</th>
<th>Release Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10/18</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
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Getting Started

Velocity can be integrated with external control systems for control of rooms and devices using macros and video wall presets.

Basic Setup

To begin integration, API must be enabled in the server settings.

API instructions:

◊ Open **Server Settings**.
◊ Select **Networks** from the top navigation.
◊ Select **API** from within the Networks menu.
◊ Select the **Enabled** slider. API is enabled when the slider is green.
◊ "Optional" Set the **port** to associate to the control system. By default the port is 23.

◊ Select **Tools** from the top navigation.
◊ Select **Restart Velocity** from within the Velocity tools box.

Once Velocity has restarted, it will be available for control via an external control system.

Command and Feedback Basics

Every command and feedback will have a set format that will need to be followed to be sent and received successfully.

- Every command will be terminated with a carriage return `{0D}`.
- There must be a 0.5 second (500 milliseconds) delay between each command sent to Velocity.
- Every feedback will be terminated with a carriage return `{0D}` and line feed `{0A}`.
- In the feedback, `{09}` denotes the tab delimiter between parameters.
  
  **e.g.** Feedback: `{Building ID}`{09}`{Building Name}`{09}`{Site ID}` will actually denote
  
  `{Building ID} {Building Name} {Site ID}`
  
- If a feedback example shows multiple lines, each drop in line denotes a line feed `{0A}`.
  
  **e.g.** MACRO LIST{0A}`{Macro ID}`{09}`{Macro Name}`{0A}`{Macro ID}`{09}`{Macro Name}`{0A}`END MACRO LIST{0A}`{0D}`
  
  would appear as:
  
  `MACRO LIST{0A}
  {Macro ID}`{09}`{Macro Name}`{0A}
  {Macro ID}`{09}`{Macro Name}`{0A}
  END MACRO LIST{0A}`{0D}`
The following table provides an alphabetical list of commands available on Velocity. The commands break down will appear in the order of best use.

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILDING LIST</td>
<td>Displays buildings within Velocity sites</td>
</tr>
<tr>
<td>MACRO LIST</td>
<td>Displays all macros within Velocity</td>
</tr>
<tr>
<td>MACRO RUN</td>
<td>Will run the specified macro</td>
</tr>
<tr>
<td>ROOM LIST</td>
<td>Displays rooms within Velocity sites</td>
</tr>
<tr>
<td>SITE LIST</td>
<td>Displays sites within Velocity</td>
</tr>
<tr>
<td>VIDEOWALL LIST</td>
<td>Displays all the video walls within Velocity sites</td>
</tr>
<tr>
<td>VIDEOWALL PRESETS LIST</td>
<td>Displays all the video wall presets within all the video walls</td>
</tr>
<tr>
<td>VIDEOWALL RUN</td>
<td>Runs the specified video wall preset</td>
</tr>
</tbody>
</table>
Commands

- Every command will be terminated with a carriage return \(0D\).
- Every feedback will be terminated with a carriage return \(0D\) and line feed \(0A\).
- In the feedback, \(09\) denotes the tab delimiter between parameters.

**SITE LIST**

Displays sites within Velocity.

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE LIST(0D)</td>
<td>SITE LIST(0A)</td>
</tr>
<tr>
<td></td>
<td>{Site ID}{09}{Site Name}{09}{Site City}{09}{Site State}{09} {Site Post Code}(0A)</td>
</tr>
<tr>
<td></td>
<td>{Site ID}{09}{Site Name}{09}{Site City}{09}{Site State}{09} {Site Post Code}(0A)</td>
</tr>
<tr>
<td></td>
<td>{Site ID}{09}{Site Name}{09}{Site City}{09}{Site State}{09} {Site Post Code}(0A)</td>
</tr>
<tr>
<td></td>
<td>END SITE LIST(0A)(0D)</td>
</tr>
</tbody>
</table>

SITE LIST(0D)

<table>
<thead>
<tr>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE LIST(0A)</td>
</tr>
<tr>
<td>5b8834f7ac1a4504bfa13ab8(09)Site A(09)Bay(09)California(09)99999(0A)</td>
</tr>
<tr>
<td>2c4734f7ac1a4504bfa12ab7(09)Site B(09)Anchorage(09)Alaska(09)99999(0A)</td>
</tr>
<tr>
<td>END SITE LIST(0A)(0D)</td>
</tr>
</tbody>
</table>
### Commands

- Every command will be terminated with a carriage return (0D).
- Every feedback will be terminated with a carriage return (0D) and line feed (0A).
- In the feedback, (09) denotes the tab delimiter between parameters.

**BUILDING LIST**

Displays the buildings within Velocity.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>Site ID or Site Name (not recommended)</td>
</tr>
</tbody>
</table>

**Example**

**BUILDING LIST (0D)**

```
BUILDING LIST (0D)
```

**Feedback**

```
BUILDING LIST (0A)
{Building ID} (0A) {Building Name} (0A) {Site ID} (0A)
{Building ID} (0A) {Building Name} (0A) {Site ID} (0A)
{Building ID} (0A) {Building Name} (0A) {Site ID} (0A)
{Building ID} (0A) {Building Name} (0A) {Site ID} (0A)
END BUILDING LIST (0A) (0D)
```

**BUILDING LIST (0D)**

```
BUILDING LIST (0D)
5b8834f7ac1a4504bfa13ab9 (0A) Building 1 (0A) 5b8834f7ac 1a4504bfa13ab8 (0A)
2c4734f7ac1a4504bfa12ab7 (0A) Building 1 (0A) 2c3599f7ac 1b4601bfa02ab1 (0A)
END BUILDING LIST (0A) (0D)
```

**BUILDING LIST 5b8834f7ac1a4504bfa13ab8 (0D)**

```
BUILDING LIST 5b8834f7ac1a4504bfa13ab8 (0A) 5b8834f7ac1a4504bfa13ab9 (0A) Building 1 (0A) 5b8834f7ac 1a4504bfa13ab8 (0A)
END BUILDING LIST 5b8834f7ac1a4504bfa13ab8 (0A) (0D)
```
Commands

- Every command will be terminated with a carriage return (0D).
- Every feedback will be terminated with a carriage return (0D) and line feed (0A).
- In the feedback, (09) denotes the tab delimiter between parameters.

ROOM LIST
Displays rooms within Velocity sites.

Syntax

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROOM LIST X</td>
<td>Parameter X Value</td>
</tr>
<tr>
<td>ROOM LIST Y</td>
<td>Parameter Y Value</td>
</tr>
</tbody>
</table>

Example
ROOM LIST [0D]

Feedback
ROOM LIST [0A]
{Room ID}[09]{Room Name}[09]{Building ID}[09]{Site ID}[0A]
{Room ID}[09]{Room Name}[09]{Building ID}[09]{Site ID}[0A]
{Room ID}[09]{Room Name}[09]{Building ID}[09]{Site ID}[0A]
{Room ID}[09]{Room Name}[09]{Building ID}[09]{Site ID}[0A]
{Room ID}[09]{Room Name}[09]{Building ID}[09]{Site ID}[0A]
END ROOM LIST [0A][0D]

ROOM LIST [0D]

ROOM LIST 5b8834f7ac1a4504bfa13ab8 [0D]

ROOM LIST 5b8834f7ac1a4504bfa13ab8 [0A]
5b8834f7ac1a4504bfa13ab8 [0A]
5b8834f7ac1a4504bfa13ab8 [0A]
END ROOM LIST 5b8834f7ac1a4504bfa13ab8 [0A][0D]
Commands

- Every command will be terminated with a carriage return \(\text{0D}\).
- Every feedback will be terminated with a carriage return \(\text{0D}\) and line feed \(\text{0A}\).
- In the feedback, \(\text{09}\) denotes the tab delimiter between parameters.

**MACRO LIST**
Displays all macros within Velocity.

**Syntax**
MACRO LIST

**Example**
MACRO LIST\(\text{0D}\)

**Feedback**
MACRO LIST\(\text{0A}\)
{Macro ID}{09}{Macro Name}{0A}
{Macro ID}{09}{Macro Name}{0A}
END MACRO LIST\(\text{0A}\){0D}

MACRO LIST\(\text{0D}\)

**MACRO RUN**
Runs the specified macro.

**Syntax**
MACRO RUN X

**Parameter** | **Description** | **Range**
--- | --- | ---
X | Value | Macro ID or Macro Name

**Example**
MACRO RUN 5ba28b2cac1a457380894f4e\(\text{0D}\)

**Feedback**
MACRO RUN 5ba28b2cac1a457380894f4e\(\text{0A}\)
END MACRO RUN 5ba28b2cac1a457380894f4e\(\text{0A}\){0D}

MACRO RUN Wakey_Wakey\(\text{0D}\)

**Feedback**
MACRO RUN Wakey_Wakey\(\text{0A}\)
END MACRO RUN Wakey_Wakey\(\text{0A}\){0D}
• Every command will be terminated with a carriage return \(0D\).
• Every feedback will be terminated with a carriage return \(0D\) and line feed \(0A\).
• In the feedback, \(09\) denotes the tab delimiter between parameters.

**VIDEOWALL LIST**
Displays all the video walls within Velocity sites.

### Syntax
```
VIDEOWALL LIST
```

### Example
```
VIDEOWALL LIST\(0D\)
```

### Feedback
```
VIDEOWALL LIST\(0A\)
{Video Wall ID}\(09\){Video Wall Alias}\(09\){Room ID}\(09\)
{Building ID}\(09\){Site ID}\(0A\)
{Video Wall ID}\(09\){Video Wall Alias}\(09\){Room ID}\(09\)
{Building ID}\(09\){Site ID}\(0A\)
{Video Wall ID}\(09\){Video Wall Alias}\(09\){Room ID}\(09\)
{Building ID}\(09\){Site ID}\(0A\)
END VIDEOWALL LIST\(0A\)\(0D\)
```

```
VIDEOWALL LIST\(0D\)
```

```
VIDEOWALL LIST\(0A\)
5baa3c94ac1a456e576aadb7\(09\)Velocity Video Wall\(09\)5b8834f7ac1a4504bfa13ab\(09\)5b8834f7ac1a4504bfa13ab\(0A\)
5baa5134ac1a456e576aafa2\(09\)BarWall\(09\)5baa5110ac1a456e576aafa2\(09\)5baa5134ac1a456e576aafa2\(0A\)
34f7ac1a4504bfa13ab\(0A\)
END VIDEOWALL LIST\(0A\)\(0D\)
```
### Commands

- Every command will be terminated with a carriage return (0D).
- Every feedback will be terminated with a carriage return (0D) and line feed (0A).
- In the feedback, (09) denotes the tab delimiter between parameters.

### VIDEOWALL PRESETS LIST

Displays all the video wall presets within all the video walls.

#### Syntax

```
VIDEOWALL PRESETS LIST
```

#### Example

```
VIDEOWALL PRESETS LIST

<table>
<thead>
<tr>
<th>Index #</th>
<th>Preset Name</th>
<th>VideoWall ID</th>
<th>Room ID</th>
<th>Building ID</th>
<th>Site ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4x4</td>
<td>5baa3c94ac1a456e576aadb7</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>1</td>
<td>1x2</td>
<td>5baa3c94ac1a456e576aadb7</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>0</td>
<td>2x2x2</td>
<td>5baa5134ac1a456e576aaf67</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>1</td>
<td>4x2</td>
<td>5baa5134ac1a456e576aaf67</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
</tbody>
</table>
```

#### Feedback

```
VIDEOWALL PRESETS LIST

<table>
<thead>
<tr>
<th>Index #</th>
<th>Preset Name</th>
<th>VideoWall ID</th>
<th>Room ID</th>
<th>Building ID</th>
<th>Site ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4x4</td>
<td>5baa3c94ac1a456e576aadb7</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>1</td>
<td>1x2</td>
<td>5baa3c94ac1a456e576aadb7</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>0</td>
<td>2x2x2</td>
<td>5baa5134ac1a456e576aaf67</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
<tr>
<td>1</td>
<td>4x2</td>
<td>5baa5134ac1a456e576aaf67</td>
<td>09</td>
<td>5b8834f7ac1a4504bfa13abf09</td>
<td>5b8834f7ac1a4504bfa13ab8</td>
</tr>
</tbody>
</table>
```

END VIDEOWALL PRESETS LIST
Commands

- Every command will be terminated with a carriage return \(0D\).
- Every feedback will be terminated with a carriage return \(0D\) and line feed \(0A\).
- In the feedback, \(09\) denotes the tab delimiter between parameters.

**VIDEOWALL RUN**

Runs the specified macro.

**Syntax**

```text
VIDEOWALL RUN X Y
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Value</td>
<td>Video Wall ID</td>
</tr>
<tr>
<td>Y</td>
<td>Value</td>
<td>Index #</td>
</tr>
</tbody>
</table>

**Example**

```plaintext
VIDEOWALL RUN 5baa3c94ac1a456e576aadb7 0\(0D\)
```

```plaintext
VIDEOWALL RUN 5baa5134ac1a456e576aafa2 1\(0D\)
```

**Feedback**

```plaintext
VIDEOWALL RUN 5baa3c94ac1a456e576aadb7 0\(0A\)
END VIDEOWALL RUN 5baa3c94ac1a456e576aadb7 0\(0A)\(0D\)
```

```plaintext
VIDEOWALL RUN 5baa5134ac1a456e576aafa2 1\(0A\)
END VIDEOWALL RUN 5baa5134ac1a456e576aafa2 1\(0A)\(0D\)
```
Macros & Video Walls

The basic instructions to set up Macros and Video Walls have been included, to view full instructions on Velocity setup, download the user manual from https://atlona.com/product/vsg/ or https://atlona.com/product/at-vgw-250/.

Macros

Macro instructions:

◊ Open Room Settings.
◊ Select the Macros button. A new screen will slide open.
◊ Use the orange + button on the top right to add a macro.
◊ Provide an Alias (with no spaces, a _ can be used in place of spaces) for each macro. This name will be what shows in the MACRO LIST command.

**IMPORTANT:** Each alias given to a macro should be completely unique in Velocity as this name will provide a way to differentiate between each macro shown in the macro list.

The macro IDs can be viewed within Velocity for quick reference:

◊ Press the : icon next to the macro command.
◊ Select the View Id from the drop down list. A new pop up will appear with the individual macro ID.

Video Wall instructions:

◊ Open the Room Technology page.
◊ Select the + button. A new screen will slide open.
◊ Add and set up the OmniStream encoders and decoders to the room.
◊ Select the + button again. Either search for Video Wall within the top search field or select Velocity Video Wall from Atlon within the Miscellaneous section within the technology catalog.
◊ Select the Edit button in the video wall box. The Video Wall Configuration screen will open.
◊ Provide an alias for the video wall for a way to differentiate between multiple video walls when using the VIDEOWALL LIST command.

**IMPORTANT:** Each alias given to a video wall should be completely unique in Velocity as this name will provide a way to differentiate between each video wall shown in the video wall list.
Video Wall instructions:

◊ Set up the Presets for each configuration needed for the selected video wall, providing a unique name for each preset to avoid confusion when using the VIDEOWALL PRESETS LIST command.

**NOTE:** Presets will be indexed in the order they are created, starting with 0. In the picture the first preset (named 2x2x2) will be index number 0.