

3 Autodesk 3ds Max 2021 cheat sheet

Main UI

Shift + T	Asset Tracking Toggle
Alt + A	Align
Ctrl + V	Clone
Del	Delete Objects
Ctrl + Alt + F	Fetch
Ctrl + H	Hold
Alt + N	Normal Align
Ctrl + Y	Redo Scene Operation
F12	Transform Type-In Dialog Toggle
Ctrl + Z	Undo Scene Operation
Editable Polygon Object	
Alt + Shift + E	Extrude Face (Poly)
Ctrl + Page Up then Ctrl + Up	Grow Selection (Poly)
Alt + Shift + X	Ignore Backfacing Toggle (Poly)
Alt + L	Select Sub-object Loop
Alt + R	Select Sub-object Ring
Ctrl + Page Down then Ctrl + Down	Shrink Selection (Poly)
Shift + B	Soft Selection Toggle (Poly)
Alt + Shift + 1	Refine (Spline)
File	
Ctrl + N	New Scene
Ctrl + O	Open File
Ctrl + S	Save File
Ctrl + Shift + S	Save File As
Ctrl + Alt + S	Save Incremental (+)
Group	
Ctrl + U	Group Attach
Lights and Cameras	
Ctrl + C then Alt + Shift + C	Create Camera (Physical) From View
Ctrl + Alt + Shift + C	Create Camera (Standard) From View
MAX Script	
F11	MAXScript Listener
Modifier Stack	
Alt + `	Show End Result
1	Sub-Object Level 1

2 Sub-Object Level 2

3 Sub-Object Level 3

4 Sub-Object Level 4

5 Sub-object Level 5

PolyTools

Alt + Shift + 3 Circle Loops

Alt + Shift + 4 Geo Poly

Alt + 3 Insert Loop

Alt + 4 PolyShift Move

Alt + 2 Set Flow

Alt + 5 Spin Edge

Alt + Shift + 2 Straighten Loops

Alt + 1 Swift Loop

Projection Modifier

Alt + G Geometry Selection Visibility
Toggle

Quad Menu Sets

Alt + Right click Animation

Ctrl + Alt + Shift +
Right click or Ctrl
+ Shift + Right
click Custom

Ctrl + Alt + Right
click Lighting | Render

Space Lock

Ctrl + Right click Modeling

Shift + Right click Snap

V Viewports

J Windows

Render

9 Advanced Lighting Panel

Shift + V Create Animated Sequence
File...

8 Environment Dialog Toggle

Shift + Q, Shift +
F9 Render

F9 Render Last

F10 Render SetUp...

Selection

Ctrl + A Select All

Page Up Select Ancestor

H	Select By Name
Page Down	Select Child
Shift + Page Down	Select Children
Ctrl + I	Select Invert
Ctrl + D	Select None
Ctrl + Shift + A	Select Similar
Ctrl + Shift + N	Selection Lock Toggle
Q	Smart Select
Set Key Tools	
N	Auto Key Mode Toggle
K	Set Keys
Snaps	
A	Angle Snap Toggle
Alt + S	Cycle Active Snap Type
Alt + F3	Enable Axis Constraints in Snaps Toggle
S	Snaps Toggle
Time	
,	Backup Time One Unit
.	Forward Time One Unit
End	Go to End Frame
Home	Go to Start Frame
/	Play Animation
Tools	
Insert	Affect Pivot Only Mode Toggle
Alt + Shift + 5	Center Point Cycle
Ctrl + F	Cycle Selection Method
Alt + X	Display as See-Through Toggle
Alt + H	Hide Selection
Alt + I	Hide Unselected
Alt + Q	Isolate Selection
Ctrl + Alt + Q	Isolate Selection Toggle
Ctrl + Alt + Shift + X	Keyboard Shortcut Override Toggle
M	Material Editor Toggle
Alt + W	Maximize Viewport Toggle
I	Pan Viewport
Shift + A	Quick Align
Ctrl + E	Scale Cycle
W	Select and Move

E	Select and Rotate
Show	Main Toolbar Toggle
7	Show Statistics Toggle
Y	Smart Place
R	Smart Scale
\	Sound Toggle
Shift + I	Spacing Tool
Ctrl + B	Sub-object Selection Toggle
F8	Transform Gizmo Plane Constraint Cycle
-	Transform Gizmo Size Down
=	Transform Gizmo Size Up
F5	Transform Gizmo X Constraint
F6	Transform Gizmo Y Constraint
F7	Transform Gizmo Z Constraint
Alt + U	Unhide All
Ctrl + L	Viewport Lighting Illuminate with Default / Scene Lights Toggle
Shift + F	Viewport Safe Frames Toggle
F2	Viewport Selection Shade Selected Faces Toggle
Shift + J	Viewport Selection Show Selection Bracket Toggle
Num 2	Virtual Viewport Pan Down
Num 4	Virtual Viewport Pan Left
Num 6	Virtual Viewport Pan Right
Num 8	Virtual Viewport Pan Up
Num /	Virtual Viewport Toggle
Num +	Virtual Viewport Zoom In
Num -	Virtual Viewport Zoom Out
Shift + O	Window / Crossing Toggle
Ctrl + Alt + Z	Zoom Extents
Shift + Ctrl + Z	Zoom Extents All
Z	Zoom Extents Selected
Ctrl + Alt + Shift + Z	Zoom In 2X
Alt + Z	Zoom Mode
Ctrl + W	Zoom Region Mode
[then Ctrl + =	Zoom Viewport In
] then Ctrl + -	Zoom Viewport Out
Track View	

Ctrl + 1	Add/Edit Parameters... (TV)
User Interface	
X	Launch Global Search
Viewport Lighting and Shadows	
Shift + F3	High Quality
Views	
O	Adaptive Degradation Toggle
C	Camera View
Ctrl + Shift + D	Disable Viewport
Ctrl + Alt + X	Expert Mode Toggle
F	Front View
Shift + C	Hide Cameras Toggle
Shift + G	Hide Geometry Toggle
G	Hide Grids Toggle
Shift + H	Hide Helpers Toggle
Shift + L	Hide Lights Toggle
Shift + P	Hide Particle Systems Toggle
Shift + S	Hide Shapes Toggle
Shift + W	Hide Space Warps Toggle
Alt + Home	Home View
L	Left View
Ctrl + R	Orbit View Mode
U	Orthographic User View
Ctrl + P	Pan View
P	Perspective User View
Shift + Y	Redo Viewport Operation
`	Redraw All Views
Alt + J	Selection/Preview Highlights Toggle
Ctrl + `	Show Floating Dialogs
Shift + 4	Spot/Directional Light View
T	Top View
Shift + Z	Undo Viewport Operation
Alt + Shift + Ctrl + B	Update Background Image
F4	View Edged Faces Toggle
Alt + B	Viewport Background
Up arrow	WalkThrough View Mode
F3	Wireframe / Smooth + Highlights Toggle

Edit

Edit mesh

B	Edit Soft Selection
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Edit normals

Shift + R	Break Normals
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Ctrl + C	Copy Normal
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3	Edge Level
---	------------

4	Face Level
---	------------

E	Make Explicit
---	---------------

1	Normal Level
---	--------------

5	Object Level
---	--------------

Ctrl + V	Paste Normal
----------	--------------

R	Reset Normals
---	---------------

S	Specify Normals
---	-----------------

U	Unify Normals
---	---------------

2	Vertex Level
---	--------------

Edit Patch

B	Edit Soft Selection
---	---------------------

Edit Poly

Alt + Shift + D	Attach
-----------------	--------

Ctrl + Shift + B	Bevel Mode
------------------	------------

Shift + R	Break
-----------	-------

Alt + P	Cap
---------	-----

Ctrl + Shift + C	Chamfer Mode
------------------	--------------

Ctrl + Alt + C	Collapse
----------------	----------

Shift + Ctrl + E	Connect
------------------	---------

Shift + X	Constrain to Edges
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Alt + C	Cut
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Ctrl + Alt + D	Detach
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B	Edit Soft Selection Mode
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Ctrl + Alt + Shift + E	Extrude along Spline Mode
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Shift + E	Extrude Mode
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Ctrl + Page Up then Ctrl + Up	Grow Selection
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Alt + H	Hide
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Alt + I	Hide Unselected
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Alt + Shift + X	Ignore Backfacing in Selections
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Alt + M	Make Planar
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Ctrl + M	MeshSmooth
Shift + Ctrl + Q	Quickslice Mode
;	Repeat Last Operation
Ctrl + Page Down then Ctrl + Down	Shrink Selection
Shift + Ctrl + W	Target Weld Mode
Alt + U	Unhide All
Shift + B	Use Soft Selection
Shift + Left click + Move the mouse	Extrude Polygon (Move tool selected)
Ctrl + Shift + Left click + Move the mouse	Clone Polygon (Move tool selected)
Shift + Left click + Move the mouse	Inset Polygon (Scale tool selected)
Edit Spline	
B	Edit Soft Selection
Edit/Editable Mesh	
Alt + Shift + D	Attach Mode
Ctrl + Shift + B	Bevel Mode
Shift + R	Break Vertices
Ctrl + Shift + C	Chamfer Mode
Ctrl + Alt + C	Collapse
Alt + C	Cut Mode
Ctrl + Alt + D	Detach
Ctrl + T	Edge Turn
B	Edit Soft Selection
Shift + E	Extrude Mode
Alt + H	Hide Selected
Alt + Shift + X	Ignore Backfacing in Selections
Shift + B	Soft Selection
Alt + U	Unhide All
Alt + Shift + W	Weld Selected
Shift + Ctrl + W	Weld Target Mode
Editable Poly	
Alt + Shift + D	Attach
Ctrl + Shift + B	Bevel Mode
Shift + R	Break
Alt + P	Cap
Ctrl + Shift + C	Chamfer Mode
Ctrl + Alt + C	Collapse

Shift + Ctrl + E	Connect
Shift + X	Constrain to Edges
Alt + C	Cut
Ctrl + Alt + D	Detach
B	Edit Soft Selection Mode
Ctrl + Alt + Shift + E	Extrude along Spline Mode
Shift + E	Extrude Mode
Ctrl + Page Up then Ctrl + Up	Grow Selection
Alt + H	Hide
Alt + I	Hide Unselected
Alt + Shift + X	Ignore Backfacing in Selections
Ctrl + M	MeshSmooth
Shift + Ctrl + Q	Quickslice Mode
;	Repeat Last Operation
Ctrl + Page Down, Ctrl + Down	Shrink Selection
Shift + Ctrl + W	Target Weld Mode
Alt + U	Unhide All
Shift + B	Use Soft Selection
HSDS	
B	Edit Soft Selection
B or B	Edit Soft Selection
MeshSmooth	
B	Edit Soft Selection Mode
Patch Select	
B	Edit Soft Selection
Poly Select	
B	Edit Soft Selection Mode
Projection Modifier	
B	Edit Soft Selection
B or B	Edit Soft Selection

Schematic view

B	Add Bookmark
D	Display Floater
Alt + F	Filters
Alt + A	Free All
Alt + S	Free Selected

Alt + H	Hide Selected
Ctrl + I	Invert Selected Nodes
Alt + C	Move Children
Right arrow	Next Bookmark
Left arrow	Previous Bookmark
Ctrl + U	Refresh View
F2	Rename Object
Ctrl + A	Select All Nodes
Shift + Page Down	Select Children
Ctrl + D	Select None
G	Show Grid
Shift + S	Toggle Shrink
C	Use Connect Tool
Ctrl + P	Use Pan Tool
Q	Use Select Tool
Ctrl + W	Use Zoom Region Tool
Alt + Z	Use Zoom Tool
Ctrl + Alt + Z	Zoom Extents
Z	Zoom Selected Extents

Track View

K	Add/Remove Keys
Ctrl + E	Apply Ease Curve
Ctrl + M	Apply Multiplier Curve
C	Assign Controller
Ctrl + C	Copy Controller
O	Expand Object Toggle
Enter then T	Expand Track Toggle
Alt + F	Filters
Ctrl + Alt + Z	Frame Horizontal Extents
Ctrl + Alt + Shift + Z	Frame Horizontal Extents Keys
Ctrl + L	Lock Selection
L	Lock Tangents Toggle
U	Make Controller Unique
Down arrow	Move Highlight Down
Up arrow	Move Highlight Up
M	Move Keys
Left arrow	Nudge Keys Left
Right arrow	Nudge Keys Right

Ctrl + P	Pan
Ctrl + V	Paste Controller
Ctrl + Left arrow	Retime Move Left
Ctrl + Right arrow	Retime Move Right
Ctrl + Down arrow	Scroll Down
Ctrl + Up arrow	Scroll Up
Ctrl + A	Select All
Shift + Page Down	Select Children
Ctrl + I	Select Invert
Ctrl + D	Select None
S	Snap Frames
Alt + Z	Zoom
Ctrl + W	Zoom Region

UVW Unwrap

Shift + R	Break Selected Vertices
Ctrl + C	Copy
Ctrl + Alt + D	Detach Edge Verts
Ctrl + E	Edit UVW's
Alt + F	Filter Selected Polygons
Q	Freeform Mode
Ctrl + F	Freeze Selected
Alt + H	Hide Selected
Alt + Shift + X	Ignore Back Polygons
Ctrl + L	Lock selected vertices
Ctrl + P	Pan
Ctrl + V	Paste
Enter	Planar map faces/patches
Alt + R	Relax Brush Type Cycle
Ctrl + Right arrow	Rotate -90
Ctrl + Left arrow	Rotate +90
Alt + E	Show Seams In Viewport
S	Snap
Shift + B	Soft Selection
Ctrl + Page Down then Ctrl + Down	Texture Vertex Contract Selection
Ctrl + Page Up then Ctrl + Up	Texture Vertex Expand Selection
W	Texture Vertex Move Mode
E	Texture Vertex Rotate Mode

R	Texture Vertex Scale Mode
Alt + Shift + W	Texture Vertex Weld Selected
Shift + Ctrl + W	Texture VertexTarget Weld
Ctrl + Shift + F	Unfreeze All
Alt + U	Unhide All
O	Unwrap Options
U	Update Map
Alt + 4	UV Paint Movement
Alt + Z	Zoom
Ctrl + Alt + Z	Zoom Extents
Z	Zoom Extents Selected
Ctrl + W	Zoom Region
Shift + Space	Zoom To Gizmo

Material Editor and SME Hotkeys

A	Assign Material to Selection
O	Get Material
Left arrow	Go Backward to Sibling
Right arrow	Go Forward to Sibling
Up arrow	Go to Parent
F9	Make Preview
A	Assign Material to Selection
Del	Delete Selected
H	Hide Unused Nodeslots
L	Lay Out All
C	Lay Out Children
O	Material/Map Browser
Alt + C	Move Children
N	Navigator
Alt + P	Pan to Selected
Ctrl + P	Pan Tool
P	Parameter Editor
F2	Rename
Ctrl + A	Select All
Shift + Page Down	Select Children
Ctrl + I	Select Invert
Ctrl + D	Select None
Q	Select Tool
Ctrl + T	Select Tree

G	Show Grid
U	Update Selected Previews
Ctrl + Alt + Z	Zoom Extents
Z	Zoom Extents Selected
Ctrl + W	Zoom Region Tool
Alt + Z	Zoom Tool

Biped

Ctrl + C	Copy/Paste - Copy
Ctrl + V	Copy/Paste - Paste
Ctrl + Shift + V	Copy/Paste - Paste Opposite
Alt + Ctrl + F	Fix Graphs
Alt + M	Move All - Collapse
Alt + K	Reset All Limb Keys
Alt + Ctrl + E	Scale In Transform
Alt + R	Set Animation Range
K	Set Key
Alt + T	Trackbar - Toggle Biped Keys
Alt + D	TV Select end of footsteps
Alt + S	TV Select entire foostep
Alt + A	TV Select start of footsteps

Hair Styling

Shift + Ctrl + A	Attenuate
Ctrl + B	Brush
Shift + Ctrl + 4	Brush Clump
Shift + Ctrl + 3	Brush Puff
Shift + Ctrl + 5	Brush Rotate
Shift + Ctrl + 6	Brush Scale
Shift + Ctrl + 2	Brush Stand
Shift + Ctrl + 1	Brush Translate
Ctrl + M	Clump
Alt + C	Cut
Ctrl + Page Up, Ctrl + Up	Expand Selection
Ctrl + 2	Guide
Alt + H	Hide Selected
Alt + Shift + X	Ignore Back
Ctrl + I	Invert Selection

Ctrl + L	Lock
Shift + Ctrl + =	Merge Hairgroups
Shift + Ctrl + P	Pop Selected
Shift + Ctrl + Z	Pop Zerosized
Ctrl + P	Puff
Shift + Ctrl + M	Recomb
Shift + Ctrl + T	Reset Rest
Ctrl + 4	Root
E	Rotate
Shift + Ctrl + R	Rotate Selection
R	Scale
Q	Select
Alt + U	Show Hidden
Shift + Ctrl + F	Soft Falloff
Shift + Ctrl + -	Split Hairgroups
Ctrl + N	Stand
Ctrl + 1	Tip
Shift + Ctrl + C	Toggle Collisions
Shift + Ctrl + I	Toggle Hairs
Ctrl + T	Translate
Ctrl + Z	Undo
Ctrl + Shift + L	Unlock
Ctrl + 3	Verts

Particle flow

Alt + Ctrl + P	Clean Up Particle Flow
Ctrl + C	Copy Selected In Particle View
Alt + Ctrl + M	Open PFlow Preset Manager dialog
6	Particle View Toggle
Ctrl + V	Paste In Particle View
Alt + Ctrl + C	Repair PFlow Cache System
Alt + Ctrl + R	Reset Particle View
Ctrl + A	Select All In Particle View
Shift + ;	Selected Particle Emission Toggle
Alt + Ctrl + L	Synchronize Particle Flow Layers
Particle Flow Tools	
Ctrl + C	Copy Selected In Data View

Ctrl + X	Cut Selected In Data View
S	Move Selected Down In Data View
Shift + S	Move Selected Down x10 In Data View
A	Move Selected Left In Data View
Shift + A	Move Selected Left x10 In Data View
D	Move Selected Right In Data View
Shift + D	Move Selected Right x10 In Data View
W	Move Selected Up In Data View
Shift + W	Move Selected Up x10 In Data View
Ctrl + V	Paste In Data View
F2	Rename Suboperator In Data View
Ctrl + A	Select All In Data View
Ctrl + D	Select None In Data View

Steering Wheel, Viewcube, and Walkthrough

SteeringWheels

Shift + Ctrl + ,	Decrease Walk Speed
Shift + Ctrl + .	Increase Walk Speed
Shift + W	Toggle SteeringWheels
Shift + Ctrl + J	Tour Building Wheel

ViewCube

Alt + Ctrl + H	Home
Alt + Ctrl + V	Toggle ViewCube Visibility

WalkThrough

Q	Accelerate Toggle
S then Down arrow	Back
Z	Decelerate Toggle
[	Decrease Step Size
C then Shift + Down arrow	Down
W then Up arrow	Arrow Forward
]	Increase Step Size

A then Left arrow	Arrow Left
Shift + Space	Level
Space	Lock Vertical Rotation
Alt + [	Reset Step Size
D then Right arrow	Right
E then Shift + Up arrow	Up

Misc.

ActiveShade	
D	Draw Region
P	Initialize
F9	Render
Q	Select Object
U	Update
Crowd	
S then F9	Solve
FFD	
Alt + Shift + C	Switch To Control Point Level
Alt + Shift + L	Switch To Lattice Level
Alt + Shift + S	Switch To Set Volume Level
Alt + Shift + T	Switch To Top Level
NURBS	
Alt + N	CV Constrained Normal Move
Alt + U	CV Constrained U Move
Alt + V	CV Constrained V Move
Shift + Ctrl + C	Display Curves
Alt + L	Display Shaded Lattice
Ctrl + L	Lock 2D Selection
Ctrl + Right arrow	Select Next in U
Ctrl + Up arrow	Select Next in V
Ctrl + Left arrow	Select Previous in U
Ctrl + Down arrow	Select Previous in V
H	Select Sub-Object By Name
Alt + 1	Set Tessellation Preset 1
Alt + 2	Set Tessellation Preset 2
Alt + 3	Set Tessellation Preset 3
Shift + B	Soft Selection
Alt + Shift + C	Switch To Curve Level
Alt + Shift + I	Switch To Imports Level

Alt + Shift + P	Switch To Point Level
Alt + Shift + V	Switch To Surface CV Level
Alt + Shift + S	Switch To Surface Level
Alt + Shift + T	Switch To Top Level
Physique	
Ctrl + C	Copy Envelope
Del	Delete
Page Down	Next
Ctrl + V	Paste Envelope
Page Up	Previous
Ctrl + E	Reset Envelopes
Reaction Manager	
Ctrl + I	Set Max Influence
Alt + I	Set Min Influence
Video Post	
F9	Execute Sequence
Ctrl + Shift + N	New Sequence
Ctrl + P	Pan
Ctrl + Alt + Z	Zoom Extents
Ctrl + W	Zoom Region
WeightTable	
Ctrl + C	Copy
Ctrl + V	Paste
Ctrl + A	Select All
Ctrl + I	Select Invert
Ctrl + D	Select None

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More information: defkey.com/zh/autodesk-3ds-max-2021-shortcuts

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