N v1.3 / Ned v.1.01

Ned (level editor) manual

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--**Section 1 – General Stuff**

Ned is what we call the level editor for N: N-ed (**ed**itor) – hey, we thought it was clever. Anyway, Ned is built right in to the release version of N. But unless you know how to get to it, you might never have known…

Unfortunately, the interface is not designed for ease of use. Due to time constraints, we were not able to get it to that point – but it is useable, and we find that once you get the hang of it, designing levels is pretty fun. Bear with us; subsequent releases will include a better level editor.

--**Section 2 – Debug Menu**

So you've downloaded a version of N on or after April 25, 2004? Here's how you get started:

Double click the Flash projector to start N. At the main menu, press the [~] or [|] (vertical bar) key. If you have an international keyboard, try the [ö] (circle with two dots above it) key.

Pressing [~] / [|] pulls up the debug menu.

> **Note!!** Press that [~] / [|] key before any looping sounds from the demo start playing, or you'll be sorry later. They loop for what seems like an infinite amount of time. The only way to stop the looping is to quit and restart, or wait a heck of a long time.

In order to understand how to use Ned, you'll need to understand debug mode. First, I'll explain a bit about what each menu command does.
The debug menu looks like this:

[M] Main menu
[L] Load level (from textbox)
[S] Save level (to clipboard)
[J] Load empty map
[E] Edit level
[P] Continue playing level
[R] Reset objects

[1] Begin recording demo
[2] Stop recording demo
[Q] Begin demo playback (WARNING: resets objects)
[W] End demo playback
[3] Load demo (from textbox)
[4] Save demo (to clipboard)

[M] Main menu
> This will bring you to the game's menu, where you can choose to read the story, see the help and start or continue a new game of N. Make sure you save your level data before going here.

[L] Load level (from textbox)
> This loads level data from the top textbox (pressing [L] brings up the text boxes – the top text box is for level data, and the bottom one is for demo data).

[S] Save level (to clipboard)
> This saves level data from the top textbox to the clipboard. You can then paste it into a text file by pressing [CTRL] +[V].

[J] Load empty map
> This feature loads a new empty map you can start with.

[E] Edit level
> The key you press to pull up Ned's menu and begin creating / editing levels. At the editor menu, pressing [insert] ([help] on my Apple pro keyboard) or [numpad 0] allows you to edit objects, and [delete] or [numpad .] allows you to edit ground tiles. See section 4 for more information.

[P] Continue playing level
> This command refers to the debug environment, and not to the real game environment. Some of the keys are different than when you're playing N – see Section 6 for more info on debug gameplay.

[R] Reset objects
> This resets all the objects in the level to their initial states. This is useful if you die while testing and want to have another go.

[1] Begin recording demo
>Demos of your actions can be recorded while you play. This handy feature lets you review your strategies, and more importantly, prove to your friends that the level you built is actually beatable.
>
>**IMPORTANT**: the level must be in its initial state when you begin recording, or your demo won't play back properly. Press [R] to reset the level before recording, especially if you've changed the level by playing in debug mode.

[2] Stop recording demo
>Pretty self-explanatory, I like to think.

[Q] Begin demo playback (WARNING: resets objects)
>This initiates playback of the current demo data. After you've recorded a demo, you can copy + paste it to a .txt file for future viewings. Press [Z] to bring up the demo text in the lower textbox. Press [Q] to start playback, and [P] to actually play the demo.

[W] End demo playback
>For when you're done watching your demo. If you try to play and the ninja is moving on its own, you forgot to stop playing the previous demo.

[3] Load demo from textbox
>After you've recorded a demo, this key loads demo data from the lower textbox into the game.

[4] Save demo (to clipboard)
>This saves level data from the top textbox to the clipboard. You can then paste it into a text file by pressing [CTRL] +[V].

See section 7 for more information on recording and playing demos.

---------------------------------------**Section 3 – Tips for Designing Levels**

Level design is pretty fun, once you get the hang of the interface. Here are a few things to remember, from seasoned level designers ;)

Save Often

It's a good idea to save your level data once when you're halfway done, and again when you're completely finished. Common sense, right?

Necessary Objects

Each level must contain a ninja and an exit. The rest is up to you.
You can add more than one exit, if you'd like.

Gold

Gold adds 2 seconds of time to the total time remaining per episode. So when you're adding gold, remember that each episode (of 5 levels) lasts 90 seconds. Adding too much can make the rest of the levels in the episode a cinch; adding too little can make things impossible. You don't have to add any gold, but used strategically, it can add quite a bit of depth to a level.

Typically, it helps to design a set of 5 levels, and then play through them with the 90 second limit in mind. This may give you an idea of how much gold to add. About one minute's worth of gold is a lot. But it doesn't have to be easy to get.

Difficulty

Have an idea of the difficulty of your level, so you can add it to your my_levels.txt file, as described in Section 4. When creating levels for N, we generally classify them as Easy, Medium or Hard, but each classification has a range from very basic to quite tricky. You should be able to figure out where your level fits after testing it.

Harder levels do not necessarily have more enemies.

Level Constraints

Stationary objects, such as mines and gold, are pretty much inconsequential – you can have lots on-screen without a noticeable drop in framerate. Generally, 30-50% of the screen should be empty when you're finished designing your level.

Enemies that move are more costly – testing levels should let you know when you've got too many. Expect a drop in framerate and therefore sluggish response.

There are no constraints on tiles, so any arrangement should work. Keep in mind, however, that some tile layouts, like steep cracks, might not be fun. As well, any changes made to the border tiles will be lost when you load the level later. So don't mess with them!

Themes

In our experience, level design works best when you start with the tiles and have an idea of the objects and enemies you'd like to place in your level. Try choosing a theme – a type of tile, a shape or pattern of tiles, a type of enemy, or a level designed around using a particular move. This will keep your level focused, and will make it feel less random and thrown together. Designing beginner levels is fun when you're starting out, and is sometimes more difficult than it first seems.

--Section 4 – Editing Levels

1.   Launch the application. (the Flash projector file, eg. "n_v12pc.exe")

2.   Press [~] or [|] when the game starts to access the debug menu.

3.   Press [J] to load an empty map.

4.   Press [E] to access Ned, and to begin editing the level. The editor menu will pop up with the following options:

[Delete] or [numpad .]
        Press to begin editing tiles

[Insert] or [numpad 0]
        Press to begin editing objects

[PGDN]
>   Press to save current level data to textbox

[PGUP]
>   Press to load level data from textbox

Adding Tiles

Press [delete] or [numpad .] from Ned's menu to add ground tiles.

They are organized into 8 types, and 4 directions, or categories, in each type. Holding [shift] when you're using any type of tile lets you place the compliment of the current tile type. Complimentary types are joined in the tile menu by a vertical line.

Ned contains a legend that will show you which key to press in order to place a particular tile.

To place a tile, press the key corresponding to the type of tile you'd like to place (ie. [1]-[8]) and position the cursor over the grid cell where you want the tile to appear.

Then press the key corresponding to the direction, or category, of that type of tile (ie. [Q], [W], [S], [A]). [E] and [D] place full or empty tiles, respectively, regardless of which type of tile is currently selected.

When you're finished editing the ground tiles, press [home] to return to the editor menu, where you can save your level data. Note also that at any time, you can press [insert] or [numpad 0] to begin editing objects.

Adding Objects

Press [insert] or [numpad 0] from Ned's menu to add objects. Objects can be items, enemies, doors, the exit and the ninja. Note that some of the object graphics in Ned are different than those seen when playing the game.

First press the key that corresponds to the type of object you'd like to add – the editor contains a legend, which shows all the objects you can add and the key you need to press to add them.

To place an object, position the cursor over the cell where you'd like the object to appear, and click. Some objects require that you hold a key while clicking.

Several objects have a number of steps you'll need to go through before they can be successfully placed. It should be fairly straightforward, but at times placed objects or board edges will obscure the cursor text. All complaints here should go to Raigan, who wrote the interface for the editor. It appears he needs to learn more about interface design. Or he could just ask Mare. <sigh>

Delete objects by holding [backspace] and clicking them. Delete exits by clicking on exit doors, not the exit trigger. Doors, however, must be deleted by clicking on the door trigger, not the door.

Hold [|] (vertical bar) and click to delete objects in reverse order of creation.

Saving and Loading Level Data

After you're finished creating a level, press [home] to return to the edit menu, and then [PGDN] to pull up the level data text boxes, which will then contain your level data.

Click in the top text box and press [CTRL]+[A] (or [Command] + [A] in Mac) to select all the text and [CTRL] +C ([Command] + [C]) to copy it so you can paste it to a text file and save it.

You can paste level data into the top text box and press [PGUP] to load it into the editor.

> **NEW!**   We are in the process of changing Ned's interface. We were not able to implement fully automatic saving and loading of level data, but do bear with us – it's on the way!
>
> In v1.2 of N, you can now see a new command in the debug menu, as described above. Saving finished levels to the clipboard can be accomplished by pressing [S]. You'll still have to open your text file and paste in the text from the clipboard, but hey, it's something.

We recommend that you document saved levels like this:

from Bills_levels.txt

//space battle 2
//difficulty – very easy
000000000000000000000000000000000000000000000000011011010000000000000011000000000000000
000000100000000011000000000000100000000000000000001000000000000000000000000110000000100
000000000000100000000010000000001000100000000100000000001000000000000000000000000000001
111100000000000100000000110011000001000010000011000010000010000100000100000100000000000001
000001000000100000000010000010000000000111010000000000000000000001000001000000001000000
010000100000000001000001000100000000000000000101010000000000000010000011110000000000000
111100000000000000000000000000000000000000000000000000000000000000000000000000000000000000000
000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000|
5^333,344.40180371574!0^156,288

//space battle 2 demo
444:0|0|35782656|73819758|71582788|2236966|0|35791394|0|0|0|0|0|0|0|35791394|201326626|71582788|
105137220|107374182|35791398|35791394|139810|0|0|0|0|0|71614464|107374180|107374182|35808870|
546|0|0|0|0|0|0|2236928|0|0|0|0|0|71584768|107365444|35791394|35791394|546|0|0|35791360|
35791394|0|0|8704|35651584|2|35790848|107374306|36071014|34|0

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Level names should be short (say, no more than 50 characters), and as descriptive as you can manage.

Testing Newly Made Levels

When you're done saving your level, press [~] or [|] from the editor menu to return to the debug menu, where you can play your new level by pressing [P]. See Section 6 for more info on playing in debug mode.

It's important to test each level, to make sure it's beatable. Recording a demo of you beating the level is also a good idea, because then people will believe you when you claim your level's not impossible.

--Section 5 – About Level Data

As you'll see when you start saving levels (or by looking at the example above), each level is saved in the form of numbers and symbols.

Generally, you can tell level data from demo data by the first few characters. If you see a ':' (colon), it's a demo.

In the level data, ground tiles are described first. You'll see a whole bunch of 1s and 0s (and other characters), followed by a [|] (vertical bar). After the vertical bar, object data is described.
In the example on page 6, look at this code, after the ground tile data:

5^333,344.40180371574

This code describes the ninja, and is ALWAYS found right after the vertical bar, unless you haven't added one yet.

In the example above:

5 represents the object's ID code.
^ separates object ID from parameters describing that object.
333 is the x coordinate of this object.
344.40180371574 is the y coordinate of this object.

If you look at the example level data on page 6 again, you'll see '!' after the ninja data:
! divides the code for each object. So it marks the end of the data for the ninja object in this case.

Each object has a different ID code and a different set of parameters.

--Section 6 – Playing in Debug Mode

At the debug menu, you can press [P] to test a level by playing through it. The debug controls are a bit different than N's game controls.

When the ninja dies in debug mode, objects will continue to behave as if the ninja was alive.

Gameplay commands

[caps lock] – pause / unpause the game
        -turn caps lock on to begin playing, after pressing [P].

[enter] - toggle between alive and dead
      -if dead, you will respawn alive at the mouse cursor's position. This is useful if you die while testing a
      level, and want to continue playing it without restarting.
       -if alive, you will be killed by a blow in the same direction as the cursor-to-player direction.

[shift] - while dead, hold shift and drag the mouse to toss the rag doll around.

[spacebar] – while dead, toggles between exploded and non-exploded.

All other commands remain the same.

--------------------------------------**Section 7 – Playing and Recording Demos**

Recording a Demo

1.   Create or load a level: Press [L] to bring up the data textboxes, and paste your level into the top
       textbox.

2.   Press [L] to load the level.

3.   Press [1] to start recording the demo.

4.   Press [P] to start playing the level, so your exploits can be recorded.

5.   Make sure caps lock is on!

6.   When you're finished playing and want to stop the demo, press [~] to return to the debug menu.

7.   Press [2] to stop recording.

8.   Press [4] to save your demo data to the clipboard.

9.   Paste demo data to a text file.

Playing Back a Recorded Demo

> **Note!!** Always paste demo data into the lower text box!
>
> The top textbox should be filled with level data corresponding to the demo -- the level in which the demo
> should be played.

1.   Press [L] to pull up the textboxes. Paste level data into the upper text box, paste demo data into the
       lower text box.

2.   Press [L] to load your level.

3.   Press [3] to load your demo.

4.   Press [Q] to initiate playback of the demo.

5.   Press [P] to start viewing the demo.

6.   Make sure caps lock is on!