

The main difference is w+ truncate the file to zero length if it exists or create a new file if it doesn't. While r+ neither deletes the content nor create a new file if it doesn't exist.

Try these codes and you will understand:

```
#include <stdio.h>
int main()
{
    FILE *fp;

    fp = fopen("test.txt", "w+");
    fprintf(fp, "This is testing for fprintf...\n");
    fputs("This is testing for fputs...\n", fp);
    fclose(fp);
}
```

and then this

```
#include <stdio.h>
int main()
{
    FILE *fp;

    fp = fopen("test.txt", "w+");
    fclose(fp);
}
```

If you will open test.txt, you will see that all data written by the first program has been erased. Repeat this for r+ and see the result.

Here is the summary of different file modes (1 => true, 0 => false):

Mode	Read	Write	Create New File*	Truncate
r	1	0	0	0
w	0	1	1	1
a	0	1	1	0
r+	1	1	0	0
w+	1	1	1	1
a+	1	1	1	0
*Creates a new file if it doesn't exist.				